THE EFFECTS OF DIRECT INSTRUCTION AND SELF-MANAGEMENT (DS) ON THE ORGANIZATIONAL SKILLS OF ELEMENTARY STUDENTS WITH ORGANIZATIONAL IMPAIRMENTS

by

Monique Green

A dissertation submitted to Johns Hopkins University in conformity with the requirements for the degree of Doctor of Education

Baltimore, Maryland

May, 2014

© 2014 Monique Green

All Rights Reserved

Abstract

The purpose of this study was to evaluate the effectiveness of an instructional package consisting of direct instruction and self-management on the organizational skills of 4 elementary students with organizational impairments. Direct instruction provides opportunities for organizationally impaired students to have organizational skills explained, taught, modeled, and practiced. Self-management helps students to control their learning and behavior. A multiple baseline design across participants was used to evaluate the effectiveness of the intervention. Two participants with Learning Disabilities (one male and one female) and two participants with Attention Deficit Hyperactivity Disorder (one male and one female), ages 7-11, enrolled in an private elementary religious school, participated in 4, contiguous, weeks of scripted lessons on the following: bringing materials to lessons, organizing a notebook, organizing a desk, and putting it all together (a review of selected lessons from the previous three weeks). The occurrences of combined organizational skills (e.g., bringing materials to lessons, organizing a notebook, and organizing a desk) increased as a function of the intervention for all participants. A probe was conducted two weeks after the completion of the study that indicated that the organizational skills obtained by the participants were maintained.

Acknowledgements

I would like to thank my Lord and Savior Jesus Christ for making provisions for me to complete this degree. This was my grandmother's dying wish. This process has truly shown me that with God all things are possible.

This dissertation is dedicated to the memories of the following individuals: my grandparents, First Sargent John L. Green and Edmonia Green, Milton Clement, Lovella Briggs, and Harry Bailey.

I would like to thank my mother, Paula Green, for being a wonderful mother and friend. Thank you for all of the years that you sacrificed for me. I would have never completed this without you.

I would also like to thank my aunt, Patricia Green, for her prayers. You are truly a blessing.

Thank you to the members of my dissertation committee for their support and guidance (Dr. Michael Rosenberg, Dr. Alan Green, Dr. Deborah Carran, Dr. John Castellani, Dr. Edward Pajak, Dr. Linda Tsantis, and Dr. Tamara Marder).

A special thank you goes to my Pastor Lehman D. Bates Sr., the Administration from New Hope Academy, Gabriel Lamptey, Tamara McKinney, Louis Hutchinson, the Green Family, relatives, neighbors, and friends. Thank you for believing in me and my research.

Food For Thought: I grew up in a single parent home in an urban area. Statistically, I was doomed before I began school. Statistics state that children from single parent homes are twice as likely to drop out of school, commit suicide, and have behavior disorders.

In 1979, my mother was told by the School Instructional Team, at the elementary school that I attended, that I was hyperactive, was unable to learn, and needed to be screened for special education services immediately. My mother disregarded this information and transferred me to another school. Thirty years later, I returned to the very school, which had given my mother a grim report, to conduct my pilot research for my doctoral studies.

I'm including this information in my acknowledgements not as means of self-promotion but as a means of hope and encouragement. The race is not given to the swift nor the strong but he who endures until the end (Ecclesiastes 9:11).

Table of Contents

List of Tables

List of Figures

Chapter One

Introduction

Students who have cognitive deficits demonstrate behaviors (e.g., poor organizational skills, lack of sustained attention to tasks, and difficulty monitoring and controlling their behavior) that lead to academic skill deficits (Rosenberg et al., 2008). Two of the major disabilities associated with cognitive deficits are Learning Disabilities (LD) and Attention Deficit Hyperactivity Disorder (ADHD). LDs are neurological disorders that affect the brain's ability to receive, process, store, and respond to information (Goran, 2011; Rourke, 2005). ADHD is a neurological disorder characterized by pervasive inattention, hyperactivity, or impulsivity (Gupta, 2010). LD is comorbid with other diagnoses, including anxiety and depression (Goran, 2011; Semrud-Clikeman, 2005).

Individuals with LD are generally of average to above-average intelligence, but have an academic deficiency in at least one subject (Kane, 2011; NCLD, 1998; Steele, 2007). A variety of definitions of LD can be found in the literature, representing various characteristics, challenges, and etiologies. The most widely accepted definition comes from the regulations for the Individual with Disabilities Education Act (IDEA). It defines a learning disability as a "disorder in one or more of the basic psychological processes involved in understanding or in using spoken or written language, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations" (Goran, 2011; NICHY, 2008, p. 1).

While the definition of LD is taken from the federal law (i.e., IDEA 2004), the definition of ADHD has been developed and disseminated by professionals in medicine, primarily pediatrics and psychiatry (Gupta, 2011; Rosenberg, 2008). More specifically, the definition of ADHD was developed by the American Psychiatric Association as part of the *Diagnostic and Statistical Manual* (5th ed.) (DSM 5) (APA, 2013). ADHD is defined as a persistent pattern of inattention and/or hyperactivity-impulsivity that is more frequently displayed and more severe than is typically observed in individuals at a comparable

level of development (APA, 2013). Regardless of definitions, it is clear that appropriate interventions and support are critical for children with LD and ADHD if they are to succeed in school.

Characteristics of LD and ADHD

The characteristics of LD and ADHD tend to vary from person to person (Greenbaum & Markel, 2001). For example, children with LD may demonstrate low achievement; problems with reading comprehension, spoken language, and writing; memory disorders; organizational deficits; behavior problems; and reasoning ability (Goran, 2011; Hendriksen, 2007; Steele, 2007; Zera et al., 2001). Additional characteristics include poor performance in reading-dependent subjects, poor vocabulary, poor retrieval skills, poor planning/prioritizing, a disorganized approach to solving problems, and poor organization in written expression (Goran, 2011; Greenbaum & Markel, 2001).

There are three major types of ADHD that are common among school-aged students and are identified by the particular behaviors in the ADHD criteria. These are a predominately hyperactive-impulsive type (ADHD-PHI); a predominately inattentive type (ADHD-IT); and a combined type (ADHD-CT), characterized by both hyperactive-impulsive and inattentive behavior (Kane, 2011; Glasser, 2008; Rosenberg et al., 2008). Each of the variations of ADHD share common and specific characteristics that impact a student's ability to be successful in school. For example, students with ADHD-IT and CT make careless mistakes in school work and other activities; have difficulty completing assignments and organizing tasks and activities; lose things necessary for tasks; and are easily distracted by irrelevant stimuli (Glaaser, 2008; Greenbaum et al., 2001). Students with ADHD-PHI have difficulty remaining seated, have a tendency to be overly verbal, have difficulty engaging in activities quietly, and are extremely fidgety (Greenbaum, 2001; Lavoie, 2005; Rosenberg, 2008). Not surprisingly, these characteristics have a negative impact on these students' abilities to be successful in school (Glaaser, 2008).

Both LD and ADHD are high-incidence disabilities, meaning they impact a large number of school-aged students. One out of five people in the United States has a learning disability (NICHCY,

2008), and the number of students classified as having the disability has grown significantly during the past 20 years (Martin et al., 2008). A report from the National Center for Learning Disabilities indicated that 2.4 million students have been diagnosed with LD and receive special education services in schools, thus representing 41% of students with disabilities nationwide (NCLD, 2012;Wendorf, 2008). According to the National Center for Educational Statistics, 5.4% of children and youth ages 3–21, with a Specific Learning Disability, were served under the Individuals with Disabilities Education Act (IDEA) during 2006/2007. In addition, 50% of all special education placements are for students with LD. There has been a 200% increase in the identification of students with LD since 1977 (Graham & Bailey, 2007).

While there is a general agreement that ADHD is the most common behavior disorder among children (Rosenberg et al., 2008), prevalence estimates vary greatly. The most frequently cited estimates range from 3% to 7% of the school-aged population (Anderson et al., 2012; Glaaser, 2008). Other reports identify figures from 3% to 9.5% (Anderson et al., 2012; Glaaser, 2008). Translated into real numbers, this means that anywhere from 2 to 4.5 million school-aged students are identified with ADHD in the United States (Rosenberg et al., 2008).

LD and ADHD are comorbid, meaning that students with these disabilities share a number of similar characteristics (NCLD, 2012; Semrud-Clikeman, 2005). Among the major characteristics shared by students with LD and ADHD is difficulty with organization. Specifically, organizational impairments result in major obstacles for many students with learning and behavioral problems (NCLD, 2012). Organizational skills are important because they are prerequisites to academic success (Dincher & McGuire, 1994). Being organized includes making "to-do" lists, prioritizing, and setting goals, all of which are associated with study skills (Bos & Vaughn, 2006). Clearly, in order to be successful in school, children must develop effective techniques and habits of organization (Levine, 1995).

Importance of the Study

Organizational deficits impact students' abilities to be prepared for class (e.g., bringing pencils, paper, and notebooks to class) and to complete assignments. For instance, students with organizational impairments lack the ability to organize necessary materials (Glaaser, 2008). Studies indicate that

students with organizational impairments also have deficits that limit the development of executive function behaviors (McGrath, 2011; Boller, 2008; Smith, as cited in McMullen, 2005). There are four distinct profiles typical of students with organizational impairments: temporal-spatial disorganization, material-spatial disorganization, transitional disorganization, and prospective retrieval disorganization (Lavoie, 2005).

Students with organizational impairments have temporal-spatial disorganization, meaning they have difficulty in allocating time, predicting how long an activity will take, following schedules, meeting deadlines, and solving problems within the classroom. These challenges may be attributed to deficits in preplanning for tasks (Hughes, 2012; Lavoie, 2005; McMullen, 2005). Students with organizational impairments may also have great difficulty understanding and utilizing sequential skills. They cannot remember events, directions, or instructions in correct order. In addition, they experience significant difficulty completing multistep tasks (e.g., long math problems, complex instructions, relating stories).

Students with organizational impairments also have material-spatial disorganization, which means they have trouble keeping track of possessions, maintaining notebooks, and arranging desks (Levine, 1995; McMullen, 2005; Mulrine, 2008). They tend to lose things frequently and often fail to follow directions efficiently. Rooms and desks are overrun with clutter, symptomatic of the students' difficulty using organizational tools (e.g., notebooks and assignment pads). In addition, students with organizational impairments who exhibit material-spatial disorganization have difficulty distinguishing left from right, have a poor sense of direction, and have a hard time interpreting visual symbols (e.g., reading, face recognition, visual memory, etc.) (Lavoie, 2005).

Students with organizational impairments who exhibit transitional disorganization have significant difficulty changing from one assignment to another. They tend to either procrastinate during transitions or speed through them. In addition, students with organizational impairments have difficulty adjusting to new settings and find it hard to settle down after stimulating or exciting activities (e.g., recess, lunch, or physical education). Most incidents of classroom misbehavior or noncompliance occur during such transitional activities (Lavoie, 2005).

The prospective retrieval disorganization subtype is greatly affected by memory deficits. Students with organizational impairments who exhibit prospective retrieval disorganization are unable to remember instructions and directions over a period of time. They also have difficulty retrieving facts, names, or rules. When given a task that is to be completed in the future (for example, to take a permission slip home and give it to the parents to sign), the student with organizational impairments forgets completely (Lavoie, 2005).

Disorganized students with organizational impairments lose pencils, misplace papers, and encourage other classroom interruptions that needn't occur. These students often neglect to separate notebooks into various subject areas, forget to bring necessary items to class, and stuff assignments randomly into their book bags and pockets. Students with organizational impairments often earn lower grades than their peers (Glasser, 2008). Students' disorganization, including their inability to keep track of assignments and turn them in on time, can contribute to low grades and academic failure (Anderson, 2008; Gambil, 2008; Steele, 2007).

Unfortunately, students with organizational impairments are typically not directly taught organizational skills in elementary education. Some research suggests that organizational skills should be a part of a student's core curriculum from the time he or she enters first grade (Naparstek, 2002). As the demands in school increase per grade level, students become increasingly unorganized. The need for students to be independent in their performance of organizational behaviors increases in secondary schools (Ellett, 1993; Paulsen, 2013). Consequently, as students with organizational impairments enter high school, they often lack the sufficient skills to meet their various educational demands (Paulsen, 2013). Thus, evidence continues to suggest the need for an increased emphasis on effective organizational skills for students with organizational impairments at both the elementary and secondary levels of education (Paulsen, 2013).

Interventions for the Organizational Deficits of Students with LD and ADHD

Organizational skills are fundamental to school success, enabling students to manage their time and materials productively and be responsible for their own academic learning. However, only a few research models have been implemented in the area of teaching organizational skills (Kisselburgh, 2003). Anderson (2008) states that instruction in organizational skills is more likely to impact students positively when used in conjunction with systematic direct instruction (Anderson, 2008). Therefore, organizational-skills instruction is needed to help students with disabilities be successful in school. In addition, organizational-skills instruction helps students with disabilities "learn how to learn" (Kisselburgh, 2003, p. 50). Two elements are most effective in teaching organizational skills: direct instruction and self-management.

Direct Instruction

Direct instruction is a behavioral model for teaching that emphasizes well-developed and carefully planned lessons designed around small learning increments and clearly defined and prescribed teaching tasks (Smith et al., 2010; NIFDI, 2008). Direct instruction is based on the theory that clear instruction can greatly improve and accelerate learning. Although there are many versions of direct instruction, each approach includes the essential elements of explaining the skill, teaching the skill, modeling the skill, practicing the skill, and giving feedback on the skill performance (Hughes, 2011). Students who are taught using direct instruction perform significantly better than students who are instructed using more indirect methods (Hughes, 2011). Research indicates that direct instruction is effective in improving overall achievement and achievement in language, reading, mathematics, spelling, health, and science (NIFDI, 2008). In addition, direct instruction positively impacts affective behavior and social skills (e.g., self-esteem/concept, attitudes toward self and school, improvement in classroom behavior, and improvement in a student's capacity to focus and sustain effort on academic tasks) (NIFDI, 2008).

Organizationally impaired students may not acquire essential skills unless they are provided with systematic direct instruction (Finstein, 2007; Minskoff & Allsopp, 2003). Students often need to learn conspicuous strategies, or sets of steps to follow, in order to solve problems or to carry out learning tasks

and processes (Smith et al., 2010). Some students may benefit from empirically supported interventions to improve productivity and organization, such as study skills programs, peer tutoring, choice options for structured academic activities, and self-monitoring of on task behavior and organizational skills (Antshel et al., 2011). Students who fail to apply organizational skills may not have had the opportunity to acquire them through an explicit instructional approach (Bos & Vaughn, 2006). This oversight places students who are struggling academically at an increased risk for low grades, and increases misperceptions of their academic performance when compared with their academically successful peers (Young et al., 1991).

Self-Management

Self-management refers to a student's ability to plan, carry out, monitor, and adjust his or her thinking and actions in order to complete a task without the constant supervision of teachers and parents. Self-management brings learning, behavior, and performance under the student's control (Bloomfield, 2010; Greenbaum & Markel, 2001). Social learning theorists (such as Bandura) indicate that self-management involves goal and standard setting, self-observation, self-judgment, and self-reaction (McMullen, 2005). Self-management programs typically involve some combination of two or more of the following strategies: self-monitoring, self-evaluation, and positive reinforcement (Rafferty, 2010; Mitchem & Young, 2001).

Poor time management, poor organization, difficulty maintaining attention, and difficulty getting to class on time are all symptoms of poor self-management skills. Researchers have found that students with organizational impairments often have low levels of attention to task, are inattentive, and are easily distracted. The lack of attention skills is further associated with inadequate, independent work habits and the inability to manage one's behavior (Bloomfield, 2010; Shimabukuro, 1999). The lack of self-management skills can also have devastating affects on academic performance in that it prevents students from learning, remembering, expressing, and applying new information. For instance, the student with organizational difficulties may have problems remembering what he or she has read, and thus with writing a satisfactory paper (Greenbaum & Markel, 2001). Teaching students to self-manage

organizational behaviors may provide immediate reinforcement for increasing organizational skills (Rafferty, 2010).

Current research (e.g., Greenbaum & Markel, 2001; Paulsen, 2013) indicates that self-management strategies can be taught to students with organizational impairments. Organizationally impaired students have a greater chance of optimizing their performance in and out of school when self-management strategies are used. Students who self-manage tend to adhere to instructions and focus on work. Self-management can greatly enhance student achievement, behavior, and self-esteem. In addition, teachers can benefit from self-management by having more time for instruction and taking less of it to deal with disruptive behaviors (Greenbaum & Markel, 2001; Paulsen, 2013).

Checklists serve as aids to self-management. Checklists provide organizationally impaired students with the support needed to juggle school-related activities, complete assignments, and manage materials. Checklists support student learning by enabling effective use of time, aiding memory, and assisting students in focusing on learning material. In addition, checklists help students remember self-management strategies and steps for homework completion, problem solving, test taking, and the management of attention and impulsivity (Greenbaum & Markel, 2001).

Purpose of the Study

In order to maximize the effectiveness of teaching organizational skills to students with organizational impairments, a package of direct instruction and self-management (DS) is needed. DS is a multicomponent approach designed to help students learn organizational skills and ultimately "navigate" their learning. DS contains practices that build upon each other by teaching and supporting students as they organize their learning activities. Specifically, direct instruction provides opportunities for organizationally impaired students to have organizational skills explained, taught, modeled, and practiced.

Feedback on skill performance is also provided (Smith, 2010). Self-management helps students to control their learning and behavior. Students with organizational impairments do not spontaneously develop time management, organization, or independent learning skills. Teaching students to self-manage organizational behaviors provides immediate reinforcement for increasing organizational skills (Paulsen,

2013). Taken together, the components of the DS package (direct instruction and self-management) are necessary for students with organizational impairments to be successful in school and obtain the discussed skills (Haisley et al., 1981; Greenbaum & Markel, 2001). Therefore, the purpose of this study is to evaluate the effectiveness of an instructional package consisting of direct instruction and self-management on the organizational skills of 4 elementary students with organizational impairments.

Research Questions

The research questions that will be investigated in this study are the following:

1. Will students who receive the DS package increase the amount of occurrences that they bring materials (e.g., paper and pencil) to lessons?
2. Will students who received the DS package keep a more organized notebook as measured by the amount of times that papers were placed in the correct folders?
3. Will students who received the DS package keep a more organized desk as measured by the amount of time that students put materials in the desk according to the desk map?

Summary

The significance of this study is twofold. First, limited research had been conducted on teaching organizational skills to students at the elementary level, thus adding to the research base. Second, this study adds to the knowledge base by illustrating the effectiveness of direct instruction and self-management as efficient strategies to teach students with LD and ADHD organizational skills in the classroom setting.

The second chapter will provide a literature review on the following: the history of LD and ADHD, how current legislation has changed the identification process for LD, and interventions for the organizational of students with LD and ADHD (e.g., direct instruction and self-management) and supporting research. The third chapter will provide the methodology for the study. The fourth chapter will contain the research findings. The fifth chapter will provide a discussion of the results and research questions as well as the limitations of the study and recommendations for future research.

Chapter Two

Review of the Literature

The purpose of this review is to summarize literature associated with the organizational impairments of students with cognitive deficits. As mentioned in chapter one, students who have cognitive deficits demonstrate behaviors (e.g., poor organizational skills, lack of sustained attention to tasks, and difficulty monitoring and controlling their behavior) that lead to academic skill discrepancies. Specifically, this chapter will consist of four sections that will describe multiple aspects of cognitive deficits. The first section begins with the history of the two major disabilities associated with cognitive deficits: Learning Disabilities (LD) and Attention Deficit Hyperactivity Disorder (ADHD). The second section will discuss how current legislation (e.g., Response to Intervention (RTI) and the 2004 Reauthorized Individuals with Disabilities Education Act (IDEA)) has changed the identification process of LD. The third section will address interventions for the organizational deficits of students with LD and ADHD such as Direct Instruction (DI) and Self-Management (SM) and relevant studies. Finally, the fourth section will summarize the previous three sections.

History of Learning Disabilities (LD) and Attention Deficit Hyperactivity Disorder (ADHD)

This section will highlight the antiquity of the development of "Learning Disabilities" from the 1800's to the present. The field of education has undergone significant changes in terms of the population of students and perceptions of teaching and learning. Yet, in spite of these changes, the definition of Learning Disabilities and the processes used for identification have, essentially, remained the same for the last 40 years. Due to the diverse needs of the 21st century learners that we service, it is important to examine the origins of learning disabilities, in order to understand how to modify academic supports that are relevant and applicable.

The history of LD will be divided into 4 periods in order to understand the interest, theories, and tools of the field at various points. They are: the European Foundation Period (1800-1920); the U.S. Foundation Period (1920-1960); the Emergent Period (1960-1975); the Solidification Period (1975-1985);

and the Turbulent Period (1985-2000) (Hallahan et al., 2003). These periods evidence progress and serve as guides for distinguishing the contributions in the field of Learning Disabilities (Hallahan et al., 2003).

The European Foundation Period (1800-1920)

The concept of a discrepancy between ability and achievement first appeared in the literature as early as the 1800's. During the 1800's, physicians in Europe were investigating relationships between brain injury and behavior, primarily disorders of spoken language. They were also writing about word-blindness in patients who could not read but were other-wise intelligent (Gallego et al., 2006; Hallahan et al., 2003). During the second half of this period, research gave way to investigations concerning presumed brain abnormalities and disorders of reading (Hallahan et al., 2003).

One of the first individuals to explore the relationship between brain injury and mental impairments was a physician named Franz Joseph Gall (Hallahan et al., 2003). Based on his observations of patients with brain injury, Gall asserted that separate areas of the brain controlled specific functions. Gall's discoveries contained two themes; one related to the revolutionary idea of localization of function in the brain, and the other became the basis for what was called "craniology" (e.g., the scientific study of the characteristics of the skull, such as size and shape, especially in humans) or "phrenology" (e.g., the study of the shape and protuberances of the skull, based on the now discredited belief that they reveal character and mental capacity) (Hallahan et al., 2003). Unfortunately for Gall, his name became more associated with "phrenology" than with his discovery of localization of brain function. Gall was the first to describe cases of speech loss based on injury to the frontal lobe (Hallahan et al., 2003). He did not receive credit for this discovery as this would later become known as Broca's aphasia (Hallahan et al., 2003). Gall would later be viewed as a charlatan in the medical community (Hallahan et al., 2003).

During the 1820's, John Baptiste Bouillaud, dean of the Medical School of the College of France, performed autopsies on patients with known brain injuries. This work confirmed Gall's notion of localization of brain functioning. Bouillaud proposed that movement and sensory perception were controlled in the cortex of the brain and speech in the frontal anterior lobes (Hallahan et al., 2003).

Later, Pierre Paul Broca used autopsies to continue Bouillaud's work and concluded that speech functions actually reside in the inferior left frontal lobe, an area that would later be referred to as Broca's area. Broca's name also become associated with a particular type of slow, laborious, dysfluent speech, known as Broca's aphasia (Hallahan et al., 2003).

In 1874, Carl Wernicke published a book containing 10 cases of brain injured patients with language disorders. These patients had fluent speech that was devoid of meaning. In addition, these individuals manifested difficulty in recognizing and comprehending words. Wernicke labeled this disorder "sensory aphasia" (Hallahan et al., 2003). As time progressed, this particular type of aphasia as well as the area of the left temporal lobe responsible for the disorder would be named after Wernicke (Hallahan et al., 2003).

As research in language disorders progressed, interests developed in disorders related to reading. In 1877, Adolph Kussmaul, physician, reported on observations of a middle aged woman who saw texts, could copy the texts, but was incapable of translating words into spoken words or thoughts (Hallahan et al., 2003) . As a result, Kussmaul assigned the label "word blindness" as a descriptor of this specific type of reading disability (Hallahan et al., 2003).

In 1884, Berlin, a German Ophthalmologist, introduced the term, "dyslexia" (Hallahan et al., 2003). He believed that "dyslexia" was more preferable to "word blindness" for a condition of neurological origin (Hallahan et al., 2003). Berlin presented six cases, of adults with dyslexia, each of whom had lost the ability to read even though they had normal language ability (Hallahan et al., 2003).

In 1896, W. Pringle Morgan, and English physician, published the first case study of a child with congenital word-blindness. A French physician, John Hinshelwood, inspired by the work of Morgan, studies a patient, with a proposed reading disability, from 1894 until the patient's death in 1903. During the patient's autopsy, Hinshelwood located the cause of the patient's reading disability in the left angular gyrus (Hallahan et al., 2003).

In 1917, Hinshelwood published Congenital Word-Blindness, a volume in which he noted the disproportionate number of males with this disorder and indicated the potential heritability of congenital

word-blindness (Hallahan et al., 2003). Moreover, Hinshelwood stated that the primary area of disability was faulty visual memory for words and letters. As a result, he recommended one-to-one training designed to increase visual memory for words (Hallahan et al., 2003).

The U.S. Foundation Period (1920-1960)

By 1918, all states had passed laws requiring compulsory education for children (Hallahan et al., 2003). Researchers moved beyond observing and explaining abnormal behavior. Moreover, many researchers found themselves working with children in educational settings where remediation, not etiology, became the focus (Hallahan et al., 2003). Out of necessity, these researchers built on the work of their European predecessors and this marked the introduction, in the 1920's, of IQ tests and the assumption that a discrepancy could be measured objectively (Hallahan et al., 2003). During this period, various approaches for teaching reading to students with reading difficulties were tested and implemented. As a result, two practices were introduced that laid the foundation for future work with LD. These practices were: identifying students with a reading disability using a measure of discrepancy between actual achievement and expected achievement; and using test information for designing instruction (Gallego et al., 2006).

During the 1930's, Samuel Torrey Orton, the father of the International Dyslexia Society, worked as a neuropathologist at the State Psychopathic Hospital in Iowa City, Iowa. In this capacity, Orton participated in a 2-week mobile clinic for students with learning problem where he made observations regarding students with low academic achievement, many of whom had low reading achievement (Hallahan et al., 2003). Of the 14 students that were referred for reading problems, most demonstrated IQ's in the near-average to above average-range. This led Orton to hypothesize that IQ was not always reflective of true intellectual capacity, especially in students with reading deficits. He published this work in the text entitled, Reading, Writing, and Spelling Problems in Children (Hallahan et al., 2003).

Although, Orton built upon much of Hinshelwood's work, he maintained that the skill of reading involved more areas in the brain than the angular gyrus (Hallahan et al., 2003). He proposed the theory of mixed dominance, where the brain stored mirror images of visual representations. Students with reading

disabilities lacked cerebral dominance and were unable to suppress those stored, mirror representations (Hallahan et al., 2003). Therefore mixed dominance resulted in letter and word reversals in both reading and writing. He labeled this phenomenon, "strephosymbolia", explaining that students with reading disabilities are not blind to words but twisted symbols compromising words (Hallahan et al., 2003). Orton's work would later perpetuate the myth that children with dyslexia "see things backwards".

Marion Monroe, Orton's research assistant, furthered Orton's work and pioneered two practices that are fundamental to the field of learning disabilities today (Hallahan et al, 2003). First, Monroe introduced the notion of a discrepancy between actual achievement and expected achievement as a way of identifying students with reading disabilities. She calculated a "reading index" by comparing the student's reading grade (the average of four tests: Gray's Oral Reading Paragraphs, reading comprehension as measured either by the Haggerty Test for cases less than third grade achievement or by the Monroe Test, word analysis from the Iota Word Test from the Monroe Test, and word discrimination from the Word Discrimination Test from the Monroe Test) to an average of the student's chronological, mental, and arithmetic grade (Hallahan et al., 2003).

Second, Monroe went beyond using standardized tests just to identify children with reading disabilities (Hallahan et al., 2003). She advocated analyzing the specific types of reading errors children made on the tests in order to guide instruction (Hallahan et al., 2003). As a result, the notion of what would later be called diagnostic-prescriptive teaching was created (Hallahan et al., 2003).

In addition to reading, researchers during the 1930's and 1940's began to investigate disabilities in perception, perception-motor, and attention (Hallahan et al., 2003). Much of the early research in this area focused on adults with brain injury. This aspect of investigating disabilities in attention will be covered in the History of Attention Deficit Hyperactivity Disorder (ADHD) section of this chapter.

Due to the absence of assessment tools in the 1950's, the IQ discrepancy criterion model for the identification of learning disabilities continued to be utilized (Gallego et al., 2006). Individuals who were identified as having academic challenges were referred to as "slow learners" or "feeble minded" (Gallego et al., 2006).

The Emergent Period (1960-1975)

At the close of the Foundation Period, researchers had discovered tools for identifying and educating students with disabilities (Hallahan et al., 2003). Due to research, they had an awareness of the existence of a specific construct but had, not, yet referred to the construct as LD. Thus, the emergent period was instrumental in the advent of LD into the public domain (Hallahan et al., 2003).

The term "learning disability" was first used by Dr. Samuel Kirk in 1962, in the first edition of his textbook, entitled, Educating Exceptional Children. In this text he stated: A learning disability refers to a retardation, disorder, or delayed development in one or more of the processes of speech, language, reading, spelling, writing, or arithmetic resulting from a possible cerebral dysfunction and/or emotional or behavioral disturbance and not from mental retardation, sensory deprivation, or cultural or instructional factors (Kirk, 1983; McFarland, 2013).

In 1963, Kirk used the term "learning disabilities" while addressing a group of parents at the Conference on the Exploration into Problems of Perceptually Handicapped Children. The parents were looking for a name for a proposed national organization. After listening to Kirk, they named their new organization The Association for Children with Learning Disabilities (ACLD), currently known as the LD Association of America. In addition, the term "learning disability" was adopted as a surrogate term for labels such as "brain injured" and "perceptually handicapped" (Hallahan et al., 2003; Kirk, 1983).
As the 1960's progressed, there became a greater awareness from the public and congress about Learning Disabilities. As a result, the U.S. Office of Education was charged with creating a federal definition for what constituted a learning disability (NCLD, 2013). The following definition was recorded in the first annual report of the National Advisory Committee on Handicapped Children (NACHC): Children with special learning disabilities exhibit a disorder in, one or more of the basic, psychological processes involved in understanding or in using spoken or written languages. These may be manifested in disorders of listening, thinking, talking, reading, writing, spelling, or arithmetic. They include conditions which have been referred to as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, developmental aphasia, etc. They do not include learning problems which are due primarily to visual,

hearing, or motor handicaps, to mental retardation, emotional disturbance, or to environmental disadvantage. This definition served as the basis of the 1969 Learning Disabilities Act and was later included in The Education for All Handicapped Children Act (Public Law 94-142) in 1975 (NCLD, 2013).

The Solidification Period (1975-1985)

Hallahan indicated that 1975 to 1985 marked a period in which the field solidified both the definition and federal regulations for identifying students with LD (2003). In 1975 President Gerald Ford signed the Education of All Handicapped Children ACT (EAHCA) into law (Hallahan et al., 2003). This law required school districts to provide a free and appropriate education to all students (Hallahan et al., 2003). As EAHCA reached full implementation in 1977, the US Office of Education presented another definition of LD. This definition was essentially the same one proposed by the National Advisory Committee on Handicapping Conditions (NACHC) in 1968 and remains, with minor modifications, the same today (Hallahan et al., 2003). The definition is: the term "specific learning disabilities" means a disorder in one or more of the psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, speak, read, write, spell, or to do mathematical calculations. The term does not include children have LD which are primarily the result of visual, hearing, or motor handicaps, or mental retardation, or emotional disturbance, or of environmental, cultural, or economic disadvantage (Hallahan et al., 2003).

In addition to the definition, above, the US Office of Education also proposed a formula that could be used by individual states to identify students with LD (Hallahan et al., 2003). The discrepancy formula was not included due to negative public response (Hallahan et al., 2003). The US Office of Education's regulations did, however, retain the general idea of the need for a severe discrepancy between intellectual ability and achievement for Learning Disability identification (Hallahan et al., 2003).

The Turbulent Period (1985-2000)

The rapid growth of the LD field during the 1960's and 1970's created several problems. Among these problems were the definition of LD and the process for identifying students with LD (Hallahan et

al., 2003). During the 1980's and 1990's the number of students identified as having LD doubled (Hallahan et al., 2003). The US Department of Education indicated in 2000 that 2.8 million students were identified as having LD (Hallahan et al., 2003). The swift increase in the size of the population of students with LD brought problems to the surface that was noncontroversial during the Solidification period (Hallahan et al., 2003).

Throughout the Turbulent period, professional and government organizations continued to produce definitions of LD with the intent of airing at a consensus in the field. In 1986, the ACLD (currently the LD Association of America) proposed a definition of LD in which the authors stressed the chronic and lifelong nature of LD as well as the effects that disabilities may have on self-esteem, education, socialization, and/or daily living activities (Hallahan et al., 2003). This definition was unique because it lacked and exclusion clause (Hallahan et al., 2003).

A year later, the Interagency Committee on LD (ICLD) proposed a definition similar to that of the National Joint Committee on Learning Disabilities NJCLD, except for two areas (Hallahan et al., 2003). ICLD included social skills deficits as a type of LD and listed Attention Deficit Disorder (ADD) as a potential comorbid disorder with LD (Hallahan et al., 2003).

In 1988, NJCLD revised its definition. The new definition was in alignment with the lifelong nature of LD found in the Learning Disabilities Association of America (LDA) definition and disagreed with the social skill deficit as LD found in the LDA and ICLD definitions (Hallahan et al., 2003). The definition was as follows: LD is a general term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, and mathematical abilities. These disorders are intrinsic to the individuals, presumed to be due to central nervous system dysfunction, and may occur across the life span. Problems of self-regulatory behaviors, social perception, and social interaction may exist with LD but do not by themselves constitute a LD. Although LD may occur concomitantly with other handicapping conditions (for example, sensory impairment, mental retardation, serious emotional disturbance) or with extrinsic forces (such as cultural

differences, insufficient or inappropriate instruction), they are not the result of those conditions or influences (Hallahan et al., 2003).

Notwithstanding the definitions that were presented between 1975 and 1997, the reauthorization of the Individuals with Disabilities Education Act (IDEA) included essentially the same definition found in the 1975 EAHCA (Hallahan et al., 2003). Despite the advancements that had been made in the LD field between 1975 and 1997, the federal regulations authorizing special education for students with LD were still relying on the same principles regarding LD that were developed by Kirk in 1962 (Hallahan et al., 2003).

The research during the Turbulent Period produced evidence of a biological basis for LD (Hallahan et al., 2003). Albert Galburda and Norma Geschwind conducted postmortem studies in which they found differences in the size of the planum temporale between individuals with dyslexia and individuals without dyslexia. Neuroimaging studies, during this time period, also revealed that the left hemisphere of the brain seems to show abnormal functioning in individuals with dyslexia (Hallahan et al., 2003).

Although the research during the Turbulent Period answered many questions pertaining to LD, it also raised a major problem in the field that persists today (Hallahan et al., 2003). This problem was the effectiveness of the discrepancy model in identifying students with LD (Hallahan et al., 2003). The idea of using discrepancy between ability and achievement, first proposed by Monroe, was adopted by most states as part of the LD identification process (Hallahan et al., 2003). Critics argued that the discrepancy formula did not reliably identify students with LD. As a result, researchers began looking for alternative methods in LD identification other than the discrepancy based model (Hallahan et al., 2003).

The discrepancy definition of Learning Disabilities still persists today despite the attempts of No Child Left Behind (2001), the Individuals with Disabilities Education Improvement Act of 2004, and Response to Intervention (RTI) to assist in reshaping the diagnosis and identification of LD. The Impact of Response to Intervention (RTI) and the 2004 Reauthorized IDEA on the identification of students with LD will be addressed in the section after the History of Attention Deficit Hyperactivity Disorder.

History of Attention Deficit Hyperactivity Disorder (ADHD)

A brief history of Attention Deficit Hyperactivity Disorder (ADHD), during the years of 1700 to 1980, will be presented in this section. This period birthed several major developments. They are as follows: the establishment of the concept of "organic behavior"; the introduction of stimulant therapy for childhood behavior disorders; and the development of neurobiologic theories of ADHD (Baumeister et al., 2012).

Attention deficit hyperactivity disorder (ADHD) is a pervasive neurodevelopmental disorder hallmarked by core symptoms of distractibility, inattention, poor concentration, poor organizational skills, hyperactivity, and impulsivity (Gawrilow et al., 2011; Baron et al., 2007). These core symptoms result in academic and social impairments (Baron et al., 2007).

ADHD is one of the most commonly diagnosed developmental disorders. Prominent theories on ADHD suggest that ADHD symptoms arise from deficits in executive functions because these deficits reliably differentiate children with ADHD from children without ADHD (Gawrilow et al., 2011). For instance, children with ADHD show worse performances compared to children without ADHD on tasks requiring planning, inhibition, task shifting, and working memory (Gawrilow et al., 2011).

Children and adolescents with this disorder compose approximately 5% of the school aged population with males outnumbering females from 2:1 to 6:1 (DuPaul et al., 2012). Slightly over one million students or 8 %- 12% are afflicted with these conditions in the United States. Attention Deficit Disorder and Attention Deficit Hyperactivity Disorder can continue on through an individual's postsecondary education and impact one's ability to academically compete effectively with their peers (Robins & Goodman, 2012; Mueller et al., 2012).

Attention Deficit Disorder and Attention Deficit Hyperactivity Disorder are generally clustered with learning disabilities, despite being classified by psychology and psychiatry as developmental disorders (Robins & Goodman et al., 2012). The rate drops from 8 %- 12% to 4 % in adulthood, arguably as a reflection of the way in which the disorder is defined, as opposed to the fact that individuals show real "recovery" over time (Mueller et al., 2012).

Current practitioners consider ADHD to be a neurological disorder; however, this is not a new concept. A book written by Scottish Physician, Sir Alexander Crichton in 1798, entitled, *An Inquiry into the Nature and Origins of Mental Derangement*, contains the earliest clinical description of attention disorders (Baumeister et al., 2012). Sir Crichton devotes an entire chapter to "Attention and Diseases" in this book. He states that these diseases make people experience the following: "inability of attending with constancy to any one object of education"; "mental restlessness"; "walking up and down"; and "fidgets" (Baumeister et al., 2012). Sir Crichton mentions the entire core features of ADHD except impulsivity. Researchers have argued that the disorder described by Sir Crichton was the inattentive subtype of ADHD" (Baumeister et al., 2012). Sir Crichton indicated that attention disorders can have multiple etiologies including an inability to attend sufficiently due to unnatural nerves or innate characteristics that the individual was born with (Baumeister et al., 2012).

Although Crichton clearly described the characteristics of attention disorders, Sir George E. Still, a British pediatrician is often credited with being the first person to describe ADHD (Baumeister et al., 2012). The idea that Still described ADHD comes from passing statements that he had written about children with normal intelligence such as: "lack of attention which is very noticeable which no doubt accounts for considerable backwardness in school acquirements and a quite abnormal incapacity for sustained attention" (Baumeister et al., 2012). Still was describing children with attention disorders, however, he does not describe the subset as hyperactive or impulsive (Baumeister et al., 2012).

Sir Still gave a series of lectures, in 1902, based on his case materials from his many years of pediatric practice. The lectures were entitled, *Some Abnormal Psychical Conditions in Children*. The children described in the lectures were extremely diverse and demonstrated difficulty with conformity. The lectures included case studies about children with mental retardation; children who suffered brain damage as a result of various maladies such as tumors and encephalitis; and a small subset of children with average intelligence that had no physical defects. Many of the subjects described in Still's lectures would be considered to have conduct disorder today (Baumeister et al., 2012).

The occurrence of encephalitis pandemics between 1917 and 1926 firmly established the association of behavioral disorders characteristic of ADHD with infectious diseases. The medical literature of the 1920's includes numerous descriptions of behavior disorders among children who survived acute encephalitis. The characteristics of these children as well as the range of behavior problems associated with encephalitis as just as varied as those described by Still (Baumeister et al., 2012). However, it was documented and accepted that the behavior changes in children were mainly associated with some degree of hyperkinesis. This post encephalitic hyperkinetic syndrome included all of the characteristics that were associated with ADHD such as over activity, attention deficits, impulsivity, conduct disorders, and poor school performance (Baumeister et al., 2012).

The next step in the evolution of the concept of ADHD as a neurological disorder occurred during the 1930's. In 1934 Kahn and Cohen proposed the existence of a syndrome called "Organic Drivenness" by (Baumeister et al., 2012). Kahn and Cohen defined "Organic Drivenness" as a surplus of inner impulsion (Baumeister et al., 2012). Some of the characteristics of "Organic Drivenness" were described as: "general hyperkinesis," "inability in maintaining quiet attitudes," "explosive motor release of all voluntarily inhibited activity," as well as "extreme fluctuation of attention or lack of continued concentration" (Baumeister et al., 2012). Kahn and Cohen proposed that "Organic Drivenness" resulted from a lesion in the brain stem (Baumeister et al., 2012). Their works was significant in that it extended organic behavior encephalitis and included all of the core features of ADHD under a single term (Baumeister et al., 2012).

In addition, the discovery that stimulant medications are useful in treating behavior disorders in children occurred during the 1930's and was critical to further development of neurobiological theories of ADHD (Baumeister et al., 2012). The practice of treating behavior-disordered children with stimulants began at the Bradley Hospital in Rhode Island. Results from clinical trials conducted by Bradley indicated that stimulants helped students to increase interest in school work; displayed decreased motor activity; and decreased aggressive behavior (Baumeister et al., 2012).

During the 1950's and 1960's, ADHD was frequently referred to as "minimal" brain damage or brain dysfunction (McFarland et al., 1995). Efforts to link the signs and symptoms of ADHD to neurobiological lesions in the brain developed a more neuropsychological approach (Baumeister et al., 2012). Researchers began using psychological tests to evaluate the signs and symptoms of ADHD (Baumeister et al., 2012).

The 1970's sparked a change in terms of characteristics associated with ADHD. Educators realized that hyperactivity was not always a factor. Consequently, in 1980 the American Psychological Association (APA) adopted the term "Attention Deficit Disorder (ADD), which encompassed individuals with and without hyperactivity (McFarland et al., 1995). Several years later, the APA changed the term to "Attention Deficit Hyperactivity Disorder", documenting that ADHD included the following: attention problems, impulsivity, and hyperactivity in differing proportions (Baumeister et al., 2012; McFarland, 1995).

Currently, ADHD is diagnosed via the Diagnostic and Statistical Manual of Mental Disorders (DSM) V. Inattentive and hyperactivity– impulsivity symptoms serve as separate domains. It is possible to make a diagnosis of DSM-V ADHD in the presence of symptoms in one or both of these domains. As a result, there are three subtypes; predominantly inattentive (PI), predominantly hyperactive/impulsive (PH) and combined (C) (Baumeister et al., 2012).

Legislation and Identification: Response to Intervention (RTI) and the 2004 Reauthorized Individuals with Disabilities Education Act

The Elementary and Secondary Education Act (ESEA-recently referred to as the No Child Left Behind Act of 2001) and the Individuals with Disabilities Education Improvement Act of 2004 (IDEA 2004), are two US federal education law that have had a major impact on the instruction and identification process of students suspected of having learning disabilities (NJCLD, 2011). Since the mid 1990's, standards-based reform efforts and student accountability efforts were instrumental in influencing the focus of educational change (Rudebusch, 2012). The passage of the No Child Left Behind law in 2001 shifted the focus from just providing services to monitoring the quality and effectiveness of those services

(Rudebush, 2012). One of the purposes of the IDEA 2004 was to connect special education law more closely to general education law (ESEA) (NJCLD, 2011). Moreover, IDEA 2004, currently known as the Individuals with Disabilities Education Improvement Act (IDEIA), reinforces the importance for all students to have access to research-based high-quality curriculums (Rudebusch, 2012).

Adequate Yearly Progress (AYP) for all students as well as for each subgroup defined by the NCLB law have continued to increase accountability based on assessment data and high student achievement (O'Meara et al., 2011). All of the elements, above, have broadened the scope of personnel involved with these efforts as well as the implementation of Response to Intervention (RTI), which encompasses both accountability and higher student achievement for all learners (O'Meara et al., 2011).

Events that Led to Changes in LD Identification in IDEA 2004

For nearly 50 years, a "severe discrepancy" has been generally accepted as evidence of a Learning Disability and its underlying processing disorders. It is widely acknowledged that no scientific basis exists for the use of a measured IQ achievement discrepancy as either a defining characteristic or indicator of LD (Pierangelo, 2008). There are four major issues related to the use of the concept of the achievement-ability discrepancy.

The first issue is that discrepancy models fail to differentiate between children who have LD and those who have academic achievement problems related to poor instruction, lack of experience, or other problems (Pierangelo et al., 2008). It is generally agreed that the model of achievement–ability discrepancy that has been utilized was influenced by research conducted by Rutter and Yule. This research included two groups of low achieving readers, one with discrepancies and one without. It was this finding that formed the basis for the idea that a discrepancy was meaningful for classification and treatment purposes (Pierangelo et al., 2008).

The second issue is that discrepancy models discriminate against certain groups of students such as those who are outside of "mainstream" culture and those who are in the upper and lower ranges of IQ. Due to psychometric problems, discrepancy approaches tend to under identify children at the lower end of the IQ range and over identify children at the upper end (Pierangelo et al., 2008). Various formulas that

correct for the regression of the mean have been used to address this issue. However, these methods do not address issues such as language and cultural bias in IQ tests, nor does it improve the classification function of a discrepancy model (Pierangelo et al., 2008).

The third issue is that discrepancy models do not predict which students will benefit from or respond differentially to instruction. The research that focuses on this issue has examined both progress and absolute outcomes for children with and without discrepancies and has not supported the idea that two groups will respond differentially to instruction (Pierangelo et al., 2008). For instance, poor readers with discrepancies and poor readers without discrepancies perform similarly on skills considered to be important to the development of reading skills (Pierangelo et al., 2008).

The fourth issue is the issue of discrepancy models requires children to fail for a substantial amount of time before they are far enough behind to exhibit a discrepancy. In order for children to exhibit a discrepancy, two test need to be administered an IQ test (e.g., Weschler Intelligence Scale for Children) and an achievement test (e.g., Woodcock Johnson Tests of Achievement) (Pierangelo et al., 2008). Due to limitations of achievement and IQ testing, discrepancies often aren't detected until late second, third, or fourth grade. Unfortunately, educators and parents are told to wait a year to refer a student whose skills are not adequate or typical of a child's overall functioning. As a result, other problems associated with school failure develop such as: poor self-concept, compromised motivation, vocabulary deficits, and writing deficits (Pierangelo et al., 2008).

As a result of these four issues, Response to Intervention began being utilized in the process of LD determination. RTI is a model of prevention rather than failure (O'Meara et al., 2011). It brings together all of the strongest initiatives within education and reflects foundations of NCLB, IDEIA, differentiated instruction, positive behavioral support, inclusion, and teacher collaboration efforts (O'Meara et al., 2011).

Response to Intervention (RTI)

Responsiveness to Intervention also referred to as Response to Intervention (RTI) is a change in thinking about how the educational system functions to meet the needs of students. The National

Research Center on Learning Disabilities defines RTI as "an assessment and intervention process for systematically monitoring student progress and making decisions about the need for instructional modifications or increasingly intensified services using progress-monitoring data" (Pierangelo et al., 2008). RTI is viewed by many, as both, an approach to early intervention and a method of disability identification (Fuchs, 2012; Fuchs, 2009). It is commonly understood to represent a meaningful integration of assessment and intervention within a multilevel system to prevent school failure and its well-known consequences like incarceration, unemployment, and poor health (Fuchs, 2009).

RTI is both a focus on the student's response to instruction as well as the student's response to intervention. The term "response" also refers to the teacher's response to student performance and data as well (O'Meara et al., 2011). RTI happens all day, every day, rather than for a specific period of time for a specific group of students (O'Meara et al., 2011).

Due to the fact that RTI procedures were underspecified in the 2004 reauthorization of IDEA, RTI is implemented in different ways (Fuchs, 2012). For instance, some schools incorporate two tiers of increasingly intensive instruction, and others incorporate seven tiers (Fuchs, 2012; Fuchs, 2009).

There are, however, some constants in terms of what can be found in RTI systems. The essential components of an RTI system include the following: high quality instruction and learning opportunities matched to student need; identification of students struggling to meet grade level expectations; attention to students learning rate and level of performance; increasing intensity of instruction/intervention based on students' needs; all students having access to quality core instruction; and data informed educational decisions using a team problem-solving method (Rudebusch et al., 2011; O'Meara, 2011).

RTI has been supported by a number of major initiatives. Some of them include the National Reading Panel, the National Research Council Panel on Minority Overrepresentation, and the President's Committee on Excellence in Special Education (O'Meara et al., 2011).

Although RTI addresses significant shortcomings in current approaches to SLD identification and other concerns about early identification of students at risk for reading problems, it should only be considered to be one element of the Learning Disabilities determination process. RTI is insufficient as the

sole basis for accurately determining LD (Pierangelo et al., 2008). RTI provides the following information about a student: indication of the student's skill level relative to peers or a criterion benchmark, success of lack of success of particular interventions, and the sense of intensity of instructional supports that will be necessary for the student to achieve (Pierangelo et al., 2008). Therefore, RTI's purpose is not to prevent special education. Its aims are to prevent serious long-term negative consequences associated with exiting school without adequate academic competence and serve as one component for identifying students with disabilities (Fuchs, 2009).

Direct Instruction (DI)

Effective teaching practices for students with special needs continue to be a concern for researchers and teachers. Students with LD and ADHD have difficulties with effective use of strategies. Students with LD and ADHD tend to develop fewer strategies and to use strategies less often than typically achieving students (Reid, 2007). It is unknown as to why this occurs. However, what is well known is that instructional methods such as direct instruction, can improve the academic performance of students with LD and struggling learners (Reid, 2007). Therefore students with LD, should be taught effective strategies if they lack them (Reid, 2007). Students with LD learn best when explicitly taught skills (Paulsen et al., 2013). The incorporation of explicit instruction can provide structure and support for students with LD who have organizational, attention, and memory deficits (Steele, 2008). Direct Instruction has proven to consistently show positive results when implemented with fidelity, since its provocation in 1968 (Donlevy, 2010).

Direct instruction begins with a clear and systematic presentation of knowledge. The curriculum is analyzed to determine what is needed to be learned and how it can be learned in a logical and systematic manner (Fuchs, 2013; Kim & Axelord, 2005). The analysis doesn't assume background knowledge, but determines how to instruct prerequisite knowledge, explicitly while linking it to new material. In other words, children who arrive in the classroom with little to no background knowledge are considered at the very onset in the development of the curriculum (Kim & Axelrod, 2005).

Direct instruction provides intensive instructional training, both before and during classroom implementation, as well as specific guidelines for instruction within the curriculum. Direct instruction is known as a "scripted "curriculum where teachers are given a precise script to follow in presenting content (Kim & Axelrod, 2005). The scripted format is meant to ensure what is referred to by the Direct Instruction circles as "faultless communication" which is a presentation that is concise, consistent, unambiguous, and logical in terms of the language used (Fuchs, 2013; Kim & Axelrod, 2005). The scripted format also ensures that instructional strategies that are characteristic of the Direct Instruction methodology (e.g., active student participation, positive reinforcement, brisk pacing, explicit instruction, guided practice, distributed review, and constant feedback) are implemented (Kim & Axelrod, 2005).

A typical direct instruction lesson involves 8 to 12 students actively responding to scripted teacher instruction for 30 or 45 minutes. Instruction is brisk and intensive. Although the teacher is following a script, he or she is not disengaged from the instruction but is constantly monitoring the class, seeking out responses, giving feedback, and directing behavior (Kim & Axelrod, 2005). This is usually followed by independent and small group work to provide additional application and practice (Kim & Axelrod, 2005).

Students are grouped by ability; however, the grouping is flexible. Students are constantly assessed during the beginning of the program, during classroom instruction, and within periodic formal assessments (Kim & Axelrod, 2005). The curriculum is designed so that students can shift to different performance groups based on their success rate within their own group (Kim & Axelrod, 2005). Direct Instruction's system of assessment, coupled with guided practice and review intrinsic to the sequenced curriculum, guarantees fluency rather than familiarity with the material and skills (Kim & Axelrod, 2005).

At the time of its inception in 1968, during the era of the War on Poverty and an era committed to equity for minority children, Project Follow Through was the largest social science experiment ever conducted (Gersten, 2001). It involved more than 100,000 primary grade students in low-income communities in the United States (Donlevy et al., 2010; Gersten, 2001; Gersten & Keating et al., 1987). The goal of Project Follow Through was not only to provide quality educational services to students in

low income areas but to empirically determine the best methods of teaching them using social science methodology (Gersten, 2001). Follow through evaluated nine different models: Direct Instruction, Parent Education, Behavior Analysis, Southwest Lab, Bank Street, Responsive Education, TEEM, Cognitive Curriculum, and Open Education. The results, conducted by ABT Associates, clearly demonstrated that Direct Instruction programming produced superior learning when measured against the other eight models (Donlevy, 2010; Gersten, 2001; Kim & Axelrod, 2005). In other words, direct instruction outperformed other models, not only in basic skills achievement, but in cognitive and affective achievement as well (Kim & Axelrod, 2005).

Direct Instruction produced consistent positive effects in all areas of academic achievement. In fact, students, from low-income backgrounds, reached achievement levels comparable to their middle class peers. The most dramatic effects are found in the 1970 group of students who received the program starting in kindergarten (Gersten & Keating, 1987). Outcomes of Project Follow Through showed that children who started Direct Instruction in kindergarten were accelerated about seven months over children who started in first grade. By 3rd grade, kindergarten-starting children performed around the 50th percentile in Language, Math, Spelling, Reading, and Science. In comparison, kindergarten starting children in High Scope did not perform above the 22nd percentile in any subject and only at the 11th percentile in Math, which is several standard deviations less than the 48th percentile for Direct Instruction students (Engleman, 2003).

Self – Management

Self- Management instruction is a well-researched technique that has wide applications across students, age levels, behaviors, and disability labels (Reid et al., 2005; Sears, 2006). Self-management can take on many forms, including self-monitoring (recording the occurrence or nonoccurrence of one's behavior), self-evaluation (judging the quality of one's behavior using a rating scale), and self–reinforcement (having performed a pre-determined behavior to a predetermined to a predetermined quality rating such that a chosen reward is accessed) (Sears, 2006). Self-management can be used, independent of adult supervision, as a method to promote independence and desirable behaviors across a

variety of settings (Sears, 2006). Self–regulation strategies, such as self-management, are important for struggling learners because of the belief that the academic challenges of these students is due largely to problems in self-regulation of organized, strategic behaviors (Reid et al., 2013).

Although self-management has the potential to empower students in controlling their own behaviors, there are elements of adults' involvement in both teaching students to self-manage and monitoring students' performance after instruction to ensure that self-management is properly taking place (Sears, 2006). Students with disabilities are not likely to learn self-management unless their teachers select it as an instructional intervention, and know how to teach self-management to them (Sears, 2006). Additionally, the teaching of self-management strategies seem to be promising in the treatment of disabilities such as ADHD, as this improves on-task behavior and academic accuracy (Gawrilow et al., 2011).

Evidence shows that students with ADHD benefit from interventions that target self-regulation skills such as self-monitoring (Martinussen et al., 2010). For example, because of deficits in various executive functions, children with ADHD are highly distractible and thus have difficulties concentrating on goal –directed actions, especially in the classroom context (Gawrilow et al., 2011). These difficulties in turn lead to impaired academic performance (Gawrilow et al., 2011). Interventions improving the executive functions in children with ADHD, such as self-management, are essential for the treatment of ADHD in childhood (Gawrilow et al., 2011).

There are several studies that have demonstrated the positive effects of self-management being applied in school environments among students with mild disabilities. Reid et al. (2013) examined 16 studies conducted between 1974 and 2003 that focused on four types of self-regulation (e.g., self-monitoring, self-monitoring plus reinforcement, self-management, and self-reinforcement) (DuPaul et al., 2012). Effect sizes for on task behavior and academic accuracy were large with similar results across the four types of self-regulation interventions (DuPaul et al., 2012). A meta-analysis by Reid, Trout, and Schwartz in 2005 found that interventions targeting self-monitoring strategies in children with ADHD

improved their performance on tasks that require executive control (e.g., organization of materials, time management, and planning) (Gawrilow et al., 2011).

Guresko-Moore and DuPaul (2007) conducted a study on the effects of self-management procedures to enhance the classroom preparation skills and homework completion behaviors of middle school students with Attention Deficit Hyperactivity Disorder. A multiple baseline design across participants design was utilized in the study. Six male students enrolled in a public middle school received training in self-management that focused on classroom preparation skills (e.g., having pen and paper on the desk and having relevant instructional materials open when the lesson begins) and homework completion behaviors. The results of this study indicated that the percentage of classroom preparation skills increased, significantly, due to self-management for all participants.

Guresko-Moore, DuPaul, and White (2006) used a multiple-baseline across participants design to evaluate the effects of using a self-management procedure to enhance the classroom preparation skills of secondary school students with attention-deficit/ hyperactivity disorder (ADHD). Three male students, enrolled in a public secondary school, were recruited for this study due to teacher reports indicating that they were consistently unprepared for class. These students received self-management training in classroom preparation skills. The results indicated that classroom preparation skills were, significantly, increased due to self-management training. The results were consistent across the three participants.

Additional evidence indicates that students with LD also benefit from self-management strategies. Students with LD often have challenges in general education classrooms due to lack of study skills (e.g., organization of materials, time management, and planning) (Paulsen et al., 2013). It is important for students with LD to learn and apply study skills that will help them become independent learners (Paulsen et al., 2013). In order to become independent learners, students with LD must develop self-management skills, including self-monitoring, self-evaluation, and self-reinforcing as needed (Paulsen et al., 2013).

Falkenberg (2013) conducted a study that investigated the effects of a self-monitoring package on the math and spelling homework completion and accuracy rates of four fourth-grade students (two boys and two girls) with learning disabilities in an inclusive general education classroom. As a result of

using self-monitoring strategies, students demonstrated a significant increase in math and spelling homework completion and accuracy.

When students with disabilities learn to self-manage, they are more likely to rely on themselves rather than others for decision making, they empower themselves for determining areas where they desire to improve, and the need for other adults or peers to assist in controlling their behaviors is minimized or eliminated (Gureasko-Moore & DuPaul & White, 2006; Sears, 2006). In addition, self-management procedures have the potential to promote generalization across classroom settings (Gureasko et al., 2006). This study will determine if direct instruction and self-management are effective strategies in helping elementary students with organizational impairments to improve their organizational skills.

Summary

The review of the literature relating to the effectiveness of Direct Instruction and Self-Management as strategies for teaching students with organizational impairments organizational skills has demonstrated a need for the current study in the following way. There are few studies that have been completed on teaching students with LD and ADHD organizational skills. Most of these studies were conducted on students with ADHD at the middle and high school level. Moreover, very limited research has been conducted on teaching organizational skills to students with LD and ADHD at the elementary level.

The body of research has more articles, rather than studies, containing strategies that focus on teaching organizational skills to students at the middle and high school level. In addition, there is no research that investigates combining the instructional strategies of Direct Instruction and Self-Management to teach students with organizational impairments organizational skills at the elementary school level. This study is designed to address to these areas. The next chapter will discuss the specific components of the study and how the study was implemented.

Chapter Three

Method

The purpose of this study was to evaluate the effectiveness of an instructional package consisting of direct instruction and self-management (DS) on the organizational skills of elementary students with organizational impairments. The study used a multiple-baseline design across participants for four elementary students, with organizational impairments, over 4 contiguous weeks of school for each cohort for a total of 8 contiguous weeks for the entire study. This chapter will discuss the following components of the study: the participants and setting; instruments; dependent variables; independent variables; data collection procedures; and the experimental design.

Participants

The participants were 4 elementary school students, ages 7 to 11, who were identified as having either LD or ADHD and having significant organizational impairments. The students exhibited the following organizational impairments: an inability to locate materials and assignments; failure to bring materials to class; and difficulty maintaining an organized notebook and desk. Two of the participants were female and two were males. One male was in the second grade and the other was in the sixth grade. Both of the female participants were in the fourth grade. A review of student records was conducted that specifically looked at Section 504 documents. The student participants each had, current, Section 504 plans with modifications and accommodations for LD or ADHD.

For the purpose of this study, the Organizational Skills Behavior Indicator or OSBI (Appendix A) was used to identify students who were insufficiently prepared for class (i.e., did not have materials, notebook was not organized, and desk was not organized). The General Education teachers completed OSBI's on the participants prior to the intervention. The students had to have a cut score of 2.9 or below, as measured by the OSBI, for inclusion in the study. A cut score of 2.9 or below was determined to be an indicator that students were organizationally challenged and needed assistance in the following: consistently bringing materials to class, organizing a notebook, and organizing a desk. The cut scores for

all of the particpants ranged from 1.00 to 1.92. Table 1 contains demographic and OSBI score data for each student participant.

Table 1

Student Participants

Student	**Age**	**Grade**	**504 Diagnosis**	**OSBI Cut Score**
Kevin	7	2	ADHD	1.00
Francine	9	4	LD	1.18
Nancy	9	4	ADHD	1.92
Larry	11	6	LD	1.76

Special education teacher. This study required the assistance of one certified special education teacher. The researcher served as the special education teacher and had the following qualifications: a MA in Special Education; twelve years teaching experience and Maryland and District of Columbia Special Education certifications (Pre-K through adulthood).

The researcher/special education teacher taught 4 weeks of scripted lessons on the following: being prepared (week 1), organizing a notebook (week 2), organizing a desk (week 3), and putting it all together (week 4) (which was a review of selected lessons from the previous three weeks). Each weekly lesson was taught during the first 20 minutes of the morning message instructional block, Monday through Friday.

In addition, the researcher/special education teacher facilitated a training on data collection (Appendix J) which consisted of specific guidelines on how to complete and collect data using the OSBI (see Appendix A), and the OSTSS (see Appendix B). This will be, further, discussed in the data collection section.

Setting

The setting for the study was New Faith Academy, an independent private school in Prince George's County, Maryland, which serves 238 students, in grades K-12, with and without disabilities. It is a non-sectarian, non-denominational school, which emphasizes academics and character development based on family values universal to people of all faiths. Over 20 faiths and countries are represented. The student participants were from four general education classrooms. Each classroom had an average of 15 students, with a 1 to 8 teacher-to-student ratio.

Instruments

Five instruments were developed for this study: (a) the Organizational Skills Behavior Indicator (OSBI), (b) Organizational Skills Time Sampling Sheet (OSTSS), (c) Organizational Skills Survey (OSS), (d) Organizational Skills Form (OSF), and (e) the Notebook Checklist.

Organizational Skills Behavior Indicator (OSBI). The Organizational Skills Behavior Indicator (OSBI) was adapted from COBS, or the Classroom Organizational Behavior Survey (2007; Appendix A). OSBI was designed for teachers to rate the organizational behaviors of students and the extent to which organizational behaviors were exhibited in class, on a scale rating of 1 to 5 (1 meaning never; 2 meaning almost never; 3 meaning sometimes; 4 meaning almost always; and 5 meaning always). The content of the survey was developed based on a review of the literature and informal conversations with practicing elementary school teachers. In order to obtain the social validity of the scale, several elementary general education teachers completed the OSBI anonymously on their students. Based on teacher feedback, the OSBI was determined to be a socially valid instrument.

Organizational Skills Time Sampling Sheet (OSTSS). The researcher developed the Organizational Skills Time Sampling Sheet (OSTSS) in October of 2011(Appendix B). The Organizational Skills Time Sampling Sheet was designed for teachers to determine the occurrence of organizational behaviors of students (i.e., being prepared, keeping an organized notebook, and keeping an organized desk) during Reading, Math, and Science. The organizational behaviors on the OSTSS were aligned with the organizational behaviors on the OSBI. There were a total of 18 occurrences in which the organizational skills could be documented. The number 18 was derived by counting the instances of the occurrence of

the organizational skills (e.g., bringing materials to class, having an organized notebook, keeping papers in the correct folders of the notebook, and keeping papers and materials organized in a desk according to a desk map).

Organizational Skills Survey (OSS). The Organizational Skills Survey (OSS) was adapted from a study conducted by Gureasko-Moore (2006; Appendix C). The OSS was designed for students to rate their organizational behaviors, and the extent to which these behaviors were demonstrated in class and during lessons, on a 1 to 4 rating scale (1 meaning never; 2 meaning sometimes; 3 meaning seldom; 4 meaning always).

Organizational Skills Form (OSF). The Organizational Skills Form (OSF) was adapted from a study conducted by Anderson (2008; Appendix D). It was designed to assist elementary students in self-managing their organizational behaviors during lessons. Students recorded the following items on the OSF: preparedness (i.e., materials for lessons), notebook organization, and desk organization.

Notebook Checklist. The Notebook Checklist (Appendix E) was designed by the researcher in April of 2009. It was a self-management tool designed to assist elementary students in making sure that the notebook was organized. Students used a rubric, to determine if their notebook was organized, that consisted of the following: a sad face meaning that the notebook was unorganized; a happy face meaning that the notebook was almost organized; and a happy face with a thumb up meaning that the notebook was completely organized.

Fidelity Checklist. The Fidelity Checklist (Appendix F) was designed by the researcher in February of 2012. The Fidelity checklists were used to establish reliability during the duration of the study and to ensure that the intervention (e.g., scripted lessons) was taught exactly the same.

Dependent Variables

The dependent measures for this study were (a) Being Prepared, (b) Having an Organized Notebook, and (c) Keeping an Organized desk.

Combined Organizational Skills

For the purposes of this study, combined organizational skills were operationally defined as either being organized or having organizational impairments in the following areas: being prepared, keeping an organized notebook, and keeping an organized desk. All of the dependent variables were measured, any time, during the first five minutes of the Reading, Math, and Science instructional blocks.

Being prepared. For the purposes of this study, being prepared was operationally defined as bringing paper, pencil, and textbooks to lessons on a consistent basis (e.g., every day). This was measured by the amount of occurrences that students brought paper, pencils, and textbooks to class on a daily basis.

Notebook organization. For the purposes of this study, notebook organization was operationally defined as the following: folders labeled for each subject and papers placed in the appropriate folder (e.g., math papers placed in the math folder). This was measured by the amount of time papers were placed in the correct folders on a daily basis.

Keeping an Organized Desk. For the purpose of this study, keeping an organized desk was operationally defined as a student's ability to do the following: place papers and materials in the desk according to the desk map. This was measured by the amount of times that materials were placed in the desk according to the desk map.

Independent Variable

The independent variable for this study was an instructional package consisting of (a) direct instruction and (b) self-management (DS). DS was designed to help elementary students with organizational impairments to self-manage organizational behaviors. This instructional package was presented in the form of scripted lessons. Students participated in 4 weeks of scripted lessons during the first 20 minutes of the morning message instructional block on the following: Being Prepared (week 1), Organizing a Notebook (week 2), Organizing a desk (week 3) and Putting it all Together (week 4). The lessons are described below.

Week 1: Being prepared. The first week of lessons introduced students to the importance of being prepared for lessons. On the first day, the researcher/special education teacher met with the participants to explain the purpose of the study and to discuss how they were selected. The researcher/special education

teacher asked the participants the following: “What did it mean to be organized?” She gave the students a definition for being organized. The researcher/special education teacher posted two pictures. One picture depicted items that were organized and the other had items that were unorganized. She asked to students to discuss the pictures and the importance of being organized. The researcher/special education teacher asked the students to respond/list answers to the following: “What materials were needed for class?” “How well did they manage their materials?” She, then, introduced the Organizational Skills Survey (OSS; see Appendix B) to the students. The researcher/special education teacher informed the students that the OSS (see Appendix B) was designed to collect information on their opinions about their organizational skills. She explained that they would use a rating scale of 1 to 4 (1 meaning never, 2 meaning seldom, 3 meaning sometimes, and 4 meaning always) to rate themselves in the following areas: whether they were prepared for lessons, whether they kept an organized notebook, and whether they kept an organized desk. The researcher/special education teacher explained to the students that they would complete the OSS (see Appendix B) the next day.

On the second day, the researcher/special education teacher demonstrated and explained, through direct instruction, how to complete the OSS (see Appendix B) by showing the students where to write their name, date, and grade. During guided practice, she showed and assisted students in reading, writing, and completing some of the items on the survey. The students picked classroom preparation behaviors (bringing a pencil and paper to class, having an organized notebook, or keeping an organized desk) in which they had difficulty, and listed them at the bottom of the survey. The researcher/special education teacher told the students that the OSS (see Appendix B) findings would be discussed along with strategies for keeping up with their materials on the next day.

On day three, the researcher/special education teacher began the lesson by briefly reviewing the importance of being prepared for class daily. She shared the results of the OSS’s and explained to the students that when they had a strategy for keeping up with materials, organizing their notebooks, and keeping an organized desk, they would be more successful in school. The researcher/special education teacher explained that the OSF (see Appendix C) was a tool that students used to help self-manage their

organizational behaviors (being prepared, keeping an organized notebook, and keeping an organized desk). She, then, demonstrated and explained, through direct instruction, how to complete the OSF (see Appendix C) by showing the students where to write their name, date, and grade. The purpose of each column of the OSF (see Appendix C) was explained to the students. The researcher/special education teacher explained that the students were to write the date under column 1; circle yes or no if they had their materials in column 2; circle yes or no if the folders were in the notebook in column 3; circle yes or no if papers were in the correct folders in column 4; and circle yes or no if papers and materials were organized in the desk according to the map. Although all of the sections of the OSF (see Appendix C) were explained to the students, the students were only responsible for completing the name, date, grade, and prepared sections (e.g., paper and pencil only) of the OSF (see Appendix C) for the first week of the intervention. Students were told that they would complete the notebook section of the OSF during week 2 and the desk section of the OSF (see Appendix C) during week 3. During guided practice, the researcher/ special education teacher assisted the students in reading, writing, and completing some of the items on the OSF (see Appendix C). Through modeling, she instructed students to ask themselves the following self-management questions while completing the name, date, grade, and prepared sections of the OSF (see Appendix C): "Did I write my name, date, and grade on the OSF?" "Do I have a pencil and paper?" "Did I circle paper and pencil, if I have these items?" The researcher/special education teacher explained to the students that they were to complete the name, date, grade, and prepared sections (e.g., paper, pencil, textbook, crayons, and scissors only) on the OSF (see Appendix C) every day. The researcher/special education teacher closed the lesson by telling the students that they would be practicing completing the heading and Being Prepared section on the OSF on days four and five.

On days four and five, students practiced completing the heading and Being Prepared section on the OSF via reading a scenario, written by the researcher/special education teacher, in which they help an imaginary student (Messy Mona; Appendix G) complete an OSF and participating in role play activities. At the end of the day five lesson, the researcher/special education teacher told the students that during the second week they would learn how to organize a notebook.

Week 2: Organizing a notebook. The second week of lessons gave students the opportunity to clean and organize their notebooks using a step-by-step approach (Anderson et al., 2008). On day one, the researcher/special education teacher briefly reviewed what the students learned during week 1. She asked the students the following: "Why was it important to keep an organized notebook?" "What happens when students don't keep an organized notebook?" The researcher/special education teacher posted two pictures. One picture depicted an organized notebook and the other depicted an unorganized notebook. She asked the students participate in a "turn and talk" activity in which they compared and contrasted the pictures and shared their findings. The researcher/special education teacher closed the lesson by telling the students that they would be learning a color-coded system for organizing their notebooks on the next day.

On day two, the researcher/special education teacher provided direct instruction on constructing an organized notebook by showing students a model organized notebook and by introducing them to a color-coded system. Students were given labels with subjects that had a color coded grid next to them. She explained the color coded grid to the students. The students were, then, instructed to place the labels in the inside of their notebooks. The researcher/special education teacher provided guided practice to the students in assembling their notebooks according to the exemplar. The students were asked to place 2 OSFs (see Appendix C) in the beginning of the notebook. Students were given a pencil pouch to place at the front of the notebook. The researcher/special education teacher told the students to keep pencils, pencil sharpeners, and erasers in the pencil pouch. The researcher/special education teacher closed the lesson by telling the students that they would be learning how to complete the notebook sections on the OSF.

On day three, the researcher/special education teacher taught the students how to complete the notebook sections of the OSF in addition to completing the Being Prepared sections of the OSF. The researcher/special education teacher closed the lesson by telling the students that they would be practicing completing the Being Prepared and Notebook sections of the OSF on days four and five.

On days four and five, students participated in a scenario, written by the researcher/special education teacher, in which they helped a fictional student (Junky Jermaine; Appendix H) correctly complete an OSF and a role play activity in which they practiced completing both the Being Prepared and Notebook sections on the OSF. Students exchanged notebooks, completed a notebook checklist, and shared their findings to make sure that the contents of the notebook were organized properly. The researcher/special education teacher reminded the students to complete the OSF to help them keep their notebooks organized. At the end of the day five lesson, the special education teacher told the students that they would be learning strategies to help them keep an organized desk.

Week 3: Keeping an organized desk. The third week of lessons consisted of strategies to teach students how to keep an organized desk. On day one, the researcher/special education teacher briefly reviewed what the students learned during weeks 1 and 2. She asked the students what it meant to be organized and to name one strategy for being prepared for class and for keeping an organized notebook. The researcher/special education teacher posted two pictures. One picture depicted an organized desk and the other depicted an unorganized desk. She asked the students participate in a "turn and talk" activity in which they compared and contrasted the pictures, wrote their answers on chart paper, and shared their findings. The researcher/special education teacher discussed the importance of keeping an organized desk with the students. She, then, explained that they would be constructing a desk map, on the next day, to help them locate their materials more easily.

On day two, the researcher/special education teacher asked the students about the importance of organizing a desk. An example of a desk map was placed on the overhead projector. She provided the students with a definition of a desk map. The researcher/special education teacher shared with the students that a desk map was another strategy just like the OSF and color-coded folders that would help them be more organized. She informed the students that they would be creating an "actual desk map" which showed how the contents in their desk were currently kept. An exemplar of an actual desk map was placed on the overhead. During guided practice, the researcher/special education teacher asked the students to list all of the materials that they have in their desk on the front side of an index card. She, then,

asked the students to pretend that the second side of the index card was the inside of their desk. The researcher/special education teacher asked the students to draw the contents that they listed on the front side of the index on the second side of the index card exactly as they are, currently, placed. At the end of the lesson, she collected the actual desk maps and shared with the students that they would develop an "ideal desk map", on the next day, to help them organize the materials in their desks.

On day three, the researcher/special education teacher asked the students why they were required to create an actual desk map. She told the students that they would be creating an ideal desk map. An example of an ideal desk map was placed on the overhead projector. The researcher/special education teacher shared with the students that an "ideal desk map" is a tool helps students to remember how materials should and would be organized in their desks. During guided practice, she helped students to construct their "ideal desk maps". The researcher/special education teacher collected the "ideal desk maps" and shared with students that she was going to have the "ideal desk maps" laminated. She, then, told the students that they would be learning how to complete the desk section of the OSF and practicing completing the entire OSF via a scenario (Donny's Disorganized Desk; Appendix I), written by the researcher/special education teacher, and role play on days four and five.

On day four, the researcher/special education teacher distributed the "ideal desk maps". Students were taught how to complete the desk section of the OSF. The students practiced completing the entire OSF by helping an imaginary student complete an OSF during the scenario activity. The researcher/ special education teacher informed the students that they would be practicing completing the OSF via a role play activity on the next day.

On day five, the students participated in a role play activity in which they were asked to complete the OSF as if they were in their classrooms. The researcher/special education teacher posted self-management questions such as: "Did I write my name, date and grade on my OSF?" "Did I have a pencil?" as reminders for students to think and say silently to themselves when they complete the OSF and class assignments. The researcher/special education teacher shared with the students that they would begin using their "ideal desk maps" that day and would be given time, by their general education teachers,

to clean out and organize their desks according to the map. She, then, shared with the students that would be reviewing some of the lessons that they learned during the Being Prepared, Organizing a Notebook, and Organizing a Desk lessons the following week.

Week 4: Putting It All Together. The fourth week of lessons consisted of a review of selected lessons from the previous weeks. The first day consisted of a review of lesson 2 that was taught during the Being Prepared lessons. The second day consisted of a review of lesson 3 that was taught during the Being Prepared lessons. The third day consisted of a review of lesson 3 that was taught during the Organizing a Notebook lessons. The fourth day consisted of a review of lesson 5 that was taught during the Organizing a Notebook lessons. The fifth day consisted of a review of lesson 2 that was taught during the Organizing a Desk lessons. The researcher/special education teacher congratulated the students on completing the Organizational Skills lessons and reminded them to use the OSF on a daily basis.

Data Collection

Data were collected by the general education teachers on the following target behaviors: the amount of occurrences that students brought materials to lessons, amount of time papers were placed in the correct folders in the notebook, and amount of times that materials were placed in the desk according to the desk map. Prior to the study, the general education teachers received training, created and facilitated by the researcher/special education teacher, on data collection (Appendix J). The training consisted of specific guidelines on how to complete and collect data using the OSBI (see Appendix A), and the OSTSS (see Appendix B).

Data recording procedure. General education teachers collected data regarding the occurrence of each target behavior, on a daily basis, for each student using the OSTSS (Appendix B). The responsibilities of these data collectors were the following: complete the OSBI (see Appendix A) in order to identify students with organizational impairments prior to the intervention, to collect baseline and daily data in 5 minute increments using an Organizational Skills Time Sampling Sheet (OSTSS), and to collect data after the intervention using an OSBI (Appendix A). The general education teachers received $25 gift cards from Macy's, Olive Garden, Texas Roadhouse, and Nordstrom's for each week of data collection.

Baseline. During baseline the general education teachers used an OSTSS (Appendix B) to collect baseline data on all of the student participants. Data was collected, anytime, during the first five minutes of the Reading, Math, and Science instructional blocks on the target behaviors. During baseline the teachers followed their standard routines. Baseline data were collected until the data was stable for 3 days. This data was used to determine which group of students would be the first to receive the intervention.

The researcher reviewed the OSTSS data and placed the participants in two groups. The first group was labeled Cohort 1 (Kevin and Francine) and the second group was labeled Cohort 2 (Nancy and Larry). At no time was the intervention introduced during baseline.

During the intervention. Organizational skills data was collected by general education teachers on a daily basis, anytime, during the first 5 minutes of the Reading, Math, and Science periods using the OSTSS (Appendix B). During the intervention, the general education teachers, continued, to follow their regular routines.

After the intervention. After the intervention was complete, teachers completed an OSBI (Appendix A) on each student. A probe was collected by the researcher 2 weeks after the intervention was completed.

Reliability. Fidelity checklists (Appendix F) were used to establish reliability during the duration of the study. The fidelity checklist was completed by the researcher, on each participant, during each week of scripted lessons, to ensure that the lessons were taught exactly the same.

Interrater Reliability. Interrater reliability was assessed by randomly recording data using the OSTSS, on each student participant, during the Reading, Math, and Science instructional blocks. During the sessions, the researcher and the general education teacher collected data using the OSTSS (Appendix B) independently. The researcher looked at each of the cohorts four times which was a total of 8 times. Interrater reliability was 100 % for each time that the cohorts were observed. The data collection for this purpose did not require training as the researcher and the general education teacher were only required to indicate that the behavior did or did not occur. The percentage of agreement was calculated by dividing the number of agreements added to the number of disagreements, and multiplying the outcome by 100%.

Agreements were marked when both the researcher and the general education teacher recorded the occurrence of nonoccurrence of the target behaviors on the OSTSS. Interrater reliability was 100%.

Multiple Baseline Design

A multiple-baseline design across four participants over 4, contiguous, weeks of school was used during this study. The multiple baseline design was chosen because it allowed similar organizational behaviors across different students to be addressed. The design, also, allowed all students to have the same intervention, and to serve as their own control (Kazdin, 2010, Tawney & Gast, 1984; Center & Leach, 1984).

In addition, the multiple baseline across participants design is sufficient for classroom use for three reasons. First, substantial portions of school curriculums require different students to master the same skills. Second, students learn and obtain skills at different rates. Third, teachers are interested in identifying and applying instructional programs and strategies that are effective with different learners. Therefore, the multiple baseline across subjects design responds to each of these considerations by doing the following: targeting a common skill across learners; staggering instruction to allow for acquisition rate differences; and permitting teachers to validate program effectiveness across several students which enhance the generality of the findings (Kazdin, 2010, Tawney & Gast, 1984).

The participants were divided into two groups. The first group of students was labeled Cohort 1 (Kevin and Francine). The second group of students was labeled Cohort 2 (Nancy and Larry).

Data collection by the general education teachers began at the same time for both groups. Stable responding had been demonstrated by Kevin and Francine after three days in baseline conditions. This is why Kevin and Francine were placed in the first group labeled Cohort 1.

The first week of the intervention (Being Prepared lessons) was introduced to Cohort 1(Kevin and Francine) while Cohort 2 (Nancy and Larry) remained in baseline. After Cohort 1 (Kevin and Francine) completed the week 1 intervention (Being Prepared lessons), they went back into baseline. Cohort 2 (Nancy and Larry) was, then, taught the week 1 intervention (Being Prepared Lessons) while Cohort 1

(Kevin and Francine) remained in baseline. After Cohort 2 (Nancy and Larry) completed the week 1 intervention (Being Prepared Lessons), they went back into baseline.

Cohort 1 (Kevin and Francine) received week 2 of the intervention (Organizing a Notebook Lessons) while Cohort 2 (Nancy and Larry) remained in baseline. After Cohort 1 (Kevin and Francine) completed the week 2 intervention (Organizing a Notebook Lessons), they went back into baseline. Cohort 2 (Nancy and Larry), was then given week 2 of the intervention (Organizing a Notebook Lessons), while Cohort 1(Kevin and Francine) remained in baseline.

Cohort 1(Kevin and Francine) was, then, given week 3 of the intervention (Organizing a Desk Lessons) while Cohort 2 (Nancy and Larry) remained in baseline. After Cohort 1 (Kevin and Francine) completed the week 3 intervention (Organizing a Desk Lessons), they went back into baseline. Cohort 2 (Nancy and Larry) was, then, given week 3 of the intervention (Organizing a Desk Lessons) while Cohort 1 (Kevin and Francine) remained in baseline. After Cohort 2 (Nancy and Larry) completed the week 3 intervention, they went back into baseline.

Cohort 1 (Kevin and Francine) was, then, given week 4 of the intervention (Putting It All Together Lessons) while Cohort 2 (Nancy and Larry) remained in baseline. After Cohort 1 (Kevin and Francine) completed the week 4 intervention (Putting It All Together Lessons), they went back into baseline. Cohort 2 (Nancy and Larry) was, then, given week 4 (Putting It All Together Lessons) of the intervention while Cohort 1 (Kevin and Francine) remained in baseline.

The general education teachers used the (OSTSS) (see Appendix B) to collect data during baseline and the intervention, on a daily basis. During the entire study, the general education teachers maintained their regular routines. Table 2 provides detail on how the multiple baseline and staggering worked during the procedure.

Table 2

Multiple Baseline and Staggering Chart

M	T	W	TH	F
Study Training	B (Cohort 1&2)	B (Cohort 1&2)	B (Cohort 1&2)	B (Cohort 1& 2) –DATA Review
Day1 BP: Cohort 1	FIELD TRIP	Day2 BP: Cohort 1	Day3 BP: Cohort 1	IN SERVICE
B Cohort2		B Cohort2	B Cohort2	
PRESIDENT'S DAY	Day4: BP Cohort 1	Day5: BP Cohort 1	Day1 BP: Cohort 2	Day2 BP: Cohort 2
	B Cohort2	B Cohort2	B Cohort1	B Cohort1
Day3 BP: Cohort 2	Day4: BP Cohort 2	Day5: BP Cohort 2	Day1 N: Cohort 1	Day2 N: Cohort 1
B Cohort1	B Cohort1	B Cohort1	B Cohort2	B Cohort2
Day3 N: Cohort 1	Day4 N: Cohort 1	SNOW DAY	Day5 N: Cohort 1	Day1 N: Cohort 2
B Cohort2	B Cohort2		B Cohort2	B Cohort1
Day2 N: Cohort 2	Day3 N: Cohort 2	Day4 N: Cohort 2	Day5 N: Cohort 2	Day1 D: Cohort 1
B Cohort1	B Cohort1	B Cohort1	B Cohort1	B Cohort2
Day2 D: Cohort 1	Day3 D: Cohort 1	Day4 D: Cohort 1	Day5 D: Cohort 1	Day1 D: Cohort 2
B Cohort2	B Cohort2	B Cohort2	B Cohort2	B Cohort1
Day2 D: Cohort 2	Day3 D: Cohort 2	Day4 D: Cohort 2	Day5 D: Cohort 2	
B Cohort1	B Cohort1	B Cohort1	B Cohort1	REPORT CARD DAY
Day1 PT: Cohort 1	Day2 PT: Cohort 1	Day3 PT: Cohort 1	Day4 PT: Cohort 1	Day5 PT: Cohort 1
B Cohort2	B Cohort2	B Cohort2	B Cohort2	B Cohort2
Day1 PT: Cohort 2	Day2 PT: Cohort 2	Day3 PT: Cohort 2	Day4 PT: Cohort 2	Day5 PT: Cohort 2
B Cohort1	B Cohort1	B Cohort1	B Cohort1	B Cohort1
Probe				

B=Baseline, BP=Being Prepared Lessons, N=Notebook Lessons, D=Desk Lessons

Chapter Four

Results

This chapter describes the results of the study and is organized by three research questions. The data are comprised of organizational skills (e.g., bringing materials to class, having an organized notebook, keeping papers in the correct folders of the notebook, and keeping papers and materials organized in a desk according to a desk map) that should take place in an elementary classroom. These skills were measured during Reading, Math, and Science lessons. There were a total of 18 occurrences in which the organizational skills could be documented. The number 18 was derived by counting the instances of the occurrence of the organizational skills (e.g., bringing materials to class, having an organized notebook, keeping papers in the correct folders of the notebook, and keeping papers and materials organized in a desk according to a desk map).

The research questions that were investigated in this study were the following:

1. Will students who receive the DS package increase the amount of occurrences that they bring materials (e.g., paper and pencil) to lessons?
2. Will students who received the DS package keep a more organized notebook as measured by the amount of times that papers were placed in the correct folders?
3. Will students who received the DS package keep a more organized desk as measured by the amount of time that students put materials in the desk according to the desk map?

Four students ages 7 to 11 participated in this study. An individual description of each student participant is provided below. The names of the participants have been changed.

Kevin. Kevin was a 7 year old student in the second grade student. At the time of this study, Kevin was identified as a student with Attention Deficit Hyperactivity Disorder-Combined type (ADHD-CT) and was given Adderall to help manage his ADHD. He received accommodations and modifications via a 504 plan to address excessive off task behaviors (e.g., sidebar conversations, playing with materials, inability to remain seated). Kevin's teachers indicated that he was extremely disorganized and rarely had materials for lessons.

Francine. Francine was a 9 year old student in the fourth grade. At the time of this study, Francine was identified as a student with Learning Disabilities (LD). She received accommodations and modifications via a 504 plan to address off task behaviors and Reading (e.g., playing with objects, daydreaming, and extended time allotted for Reading assignments). Francine's teachers indicated that she rarely had materials for lessons and had difficulty keeping up with and locating assignments.

Nancy. Nancy was a 9 year old student in the fourth grade. At the time of this study, Nancy was identified as a student with Attention Deficit Hyperactivity Disorder-Inattentive Type (ADHD-IT) and was taking Concerta to help manage her ADHD. She received accommodations and modifications via a 504 plan to address excessive off task behavior (e.g., inability to remain seated). Nancy's teachers indicated that she had difficulty locating assignments and keeping an organized desk.

Larry. Larry was an 11 year old student in the sixth grade. At the time of this study, Larry was identified as a student with Learning Disabilities (LD). He received accommodations and modifications via a 504 plan to address Reading (e.g., extended time for Reading assignments). Larry's teachers indicated that he had difficulty locating assignments, keeping an organized desk, and bringing materials to lessons.

The students were placed in two groups, called cohorts, based on the baseline data. Kevin and Francine were placed in cohort 1. Nancy and Larry were placed in cohort 2. Each group (e.g., cohort 1 and cohort 2) along with each student's performance during baseline and the intervention is described below. The data will be presented individually for each research question as depicted in figures 1 through 18.

Research Question 1. Will students who receive the DS package increase the amount of occurrences that they bring materials (e.g., paper and pencil) to lessons?

Figure 1 illustrates the students in Cohort 1's performance during baseline and the Being Prepared Lessons. The students in Cohort 1 remained in baseline for 3 days. Both students increased the amount of occurrences that they brought materials to lessons on the second day of the intervention to 4 and 9 out of 18 times. The overall amount of occurrences that Cohort 1 brought materials to lessons increased from 2 and 6 out of 18 times to 5 and 11 out of 18 times.

Figure1

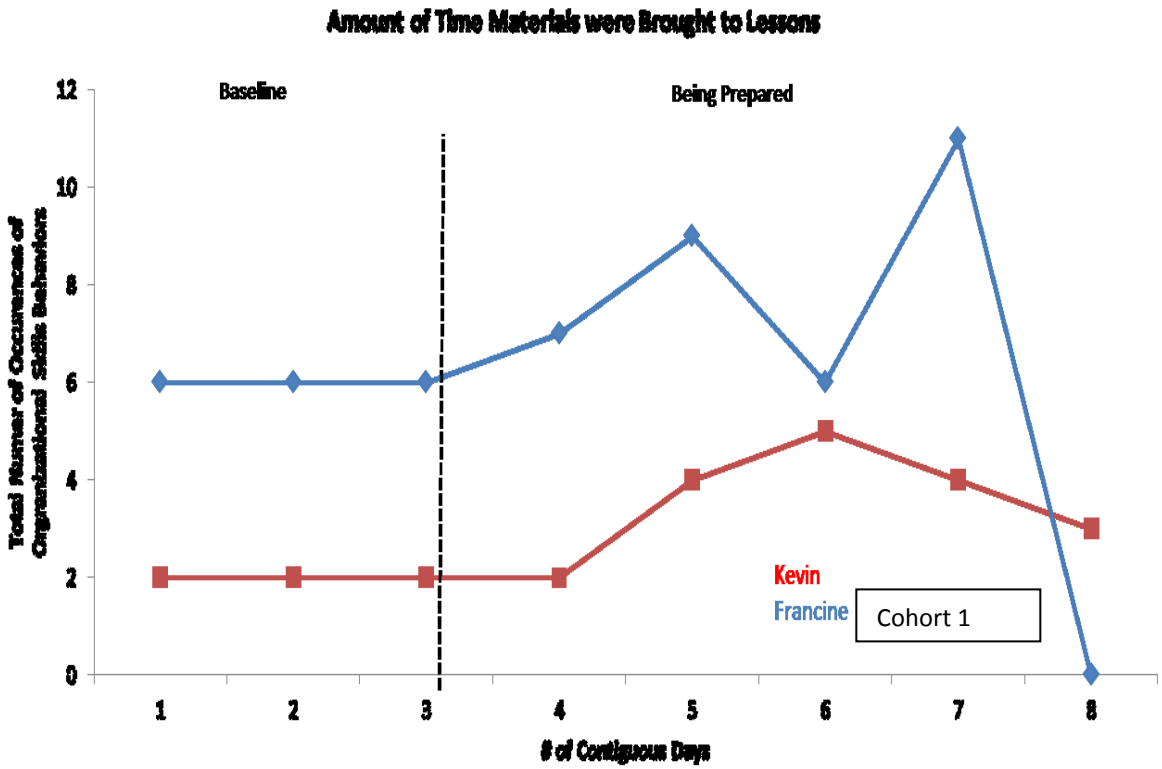


Figure 2 illustrates the students in Cohort 2's performance during baseline and the Being Prepared Lessons. The students in Cohort 2 remained in baseline for 10 days. The overall amount of occurrences that Cohort 2 brought materials to lessons increased from 6 and 13 out of 18 times to 12 and 15 out of 18 times.

Figure2

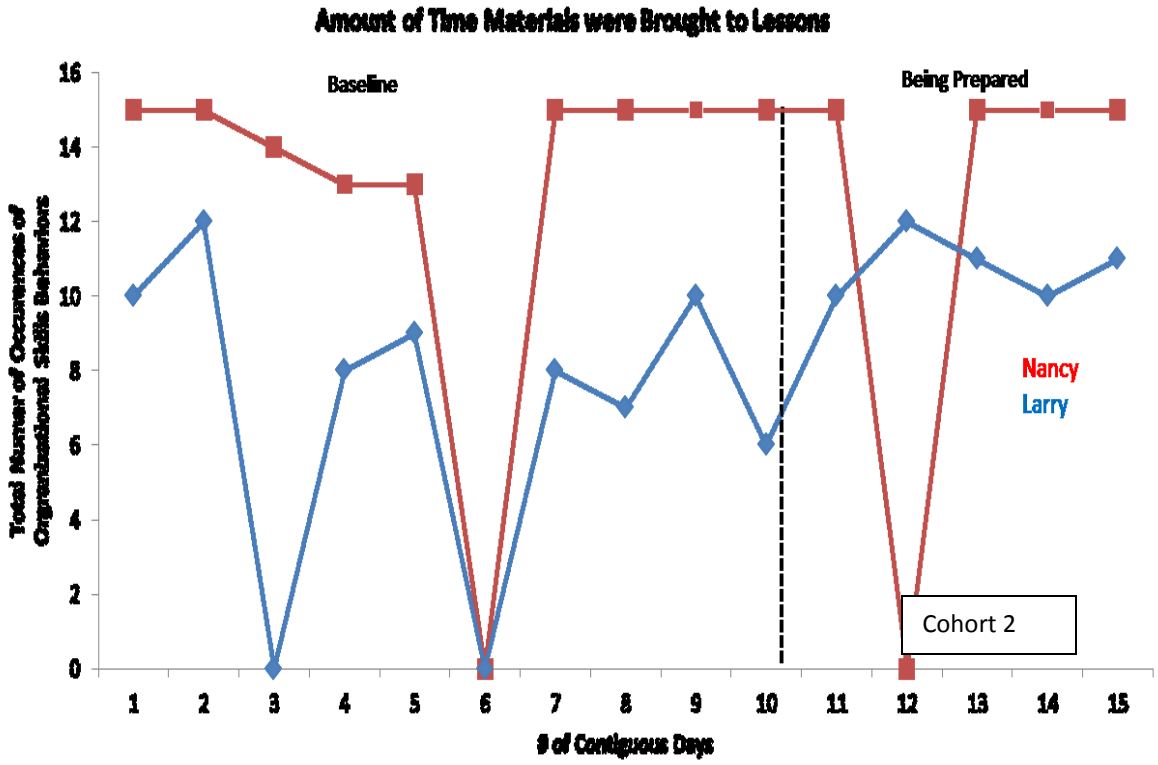


Figure 3 illustrates Kevin's performance during baseline and the Being Prepared lessons. He received 5 days of the intervention after 3 baseline sessions. During the three days of baseline, Kevin only brought materials to lessons 2 out of 18 times.

On the first day of the intervention, Kevin brought his materials 2 out of 18 times. On the second day of the intervention, Kevin brought his materials 4 out of 18 times. He brought his materials 5 out of 18 times on the third day of the intervention. Kevin's performance decreased on the fourth day of the intervention. He only brought his materials 4 out of 18 times. Kevin brought his materials 3 out of 18 times on the fifth day of the intervention. Overall, the Being Prepared Lessons increased the amount of times that Kevin brought materials to class from 2 out of 18 times to 5 out of 18 times during the intervention. A probe was conducted 2 weeks after the study was completed. At the probe, Kevin brought his materials to lessons 11 out of 18 times.

Figure 3

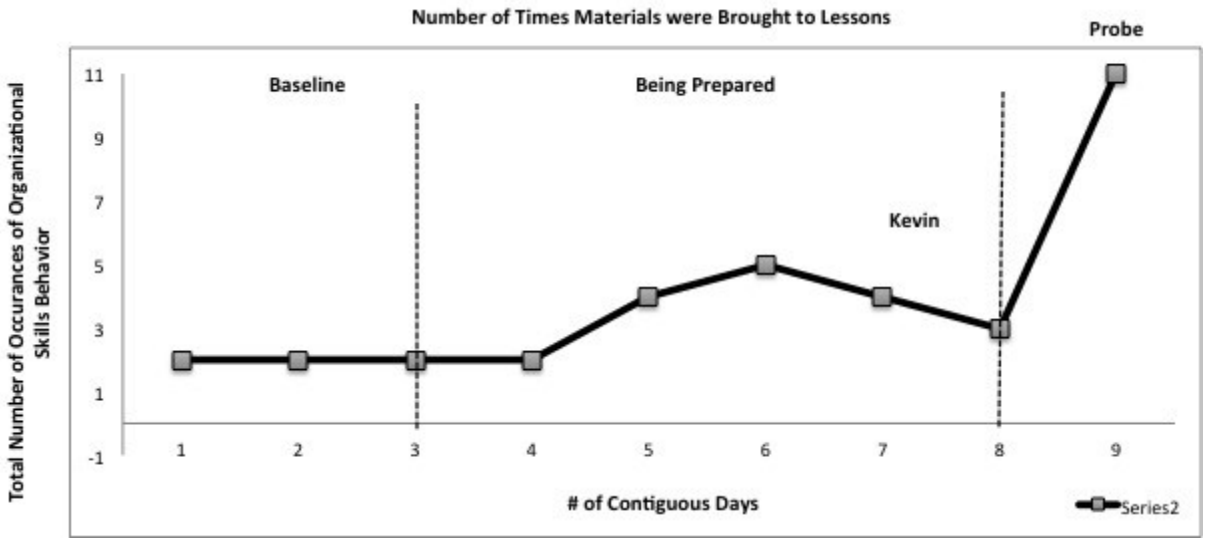


Figure 4 illustrates Francine's performance during baseline and the Being Prepared lessons. She received 5 days of the intervention after 3 baseline sessions. During the three days of baseline, Francine only brought her materials to lessons 6 out of 18 times.

On the first day of the intervention, Francine brought her materials to lessons, 7 out of 18 times. On the second day of the intervention, Francine brought her materials 9 out of 18 times. She decreased on the third day of the intervention, only bringing her materials 6 out of 18 times. Francine increased on the fourth day of the intervention by bringing her materials to lessons 11 out of 18 times. Francine was absent on the fifth day of the intervention. Overall, the Being Prepared Lessons increased the amount of times that Francine brought materials to class from 7 out of 18 times to 11 out of 18 times during the intervention. No probe data was collected for Francine because she transferred to another school a week after she completed the Organizing a Desk lessons.

Figure 4

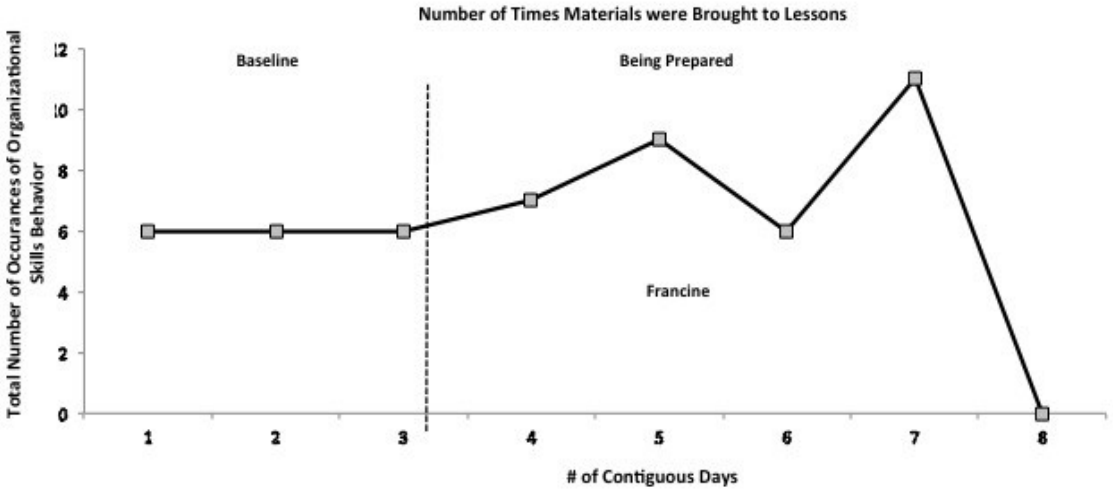


Figure 5 illustrates Nancy's performance during baseline and the Being Prepared lessons. She received 5 days of the intervention after 10 baseline sessions. During the first two days of baseline, Nancy brought her materials to lessons 15 out of 18 times. On the third day of baseline, Nancy brought her materials to lessons 14 out of 18 times. On the fourth and fifth days of baseline, Nancy brought her materials 13 out of 18 times. On the sixth day of baseline, Nancy was absent. Nancy brought her materials 15 out of 18 times during days 7 through 10 of baseline.

On day one of the intervention, Nancy brought her materials to lessons 15 out of 18 times. Nancy was absent on day two of the intervention. On days three through five, Nancy brought her materials to lessons 15 out of 18 times. Overall, the Being Prepared lessons had no effect on increasing the amount of times that Nancy brought materials to class. A probe was conducted 2 weeks after the study was completed. At the probe, Nancy brought her materials to lessons 18 out of 18 times.

Figure 5

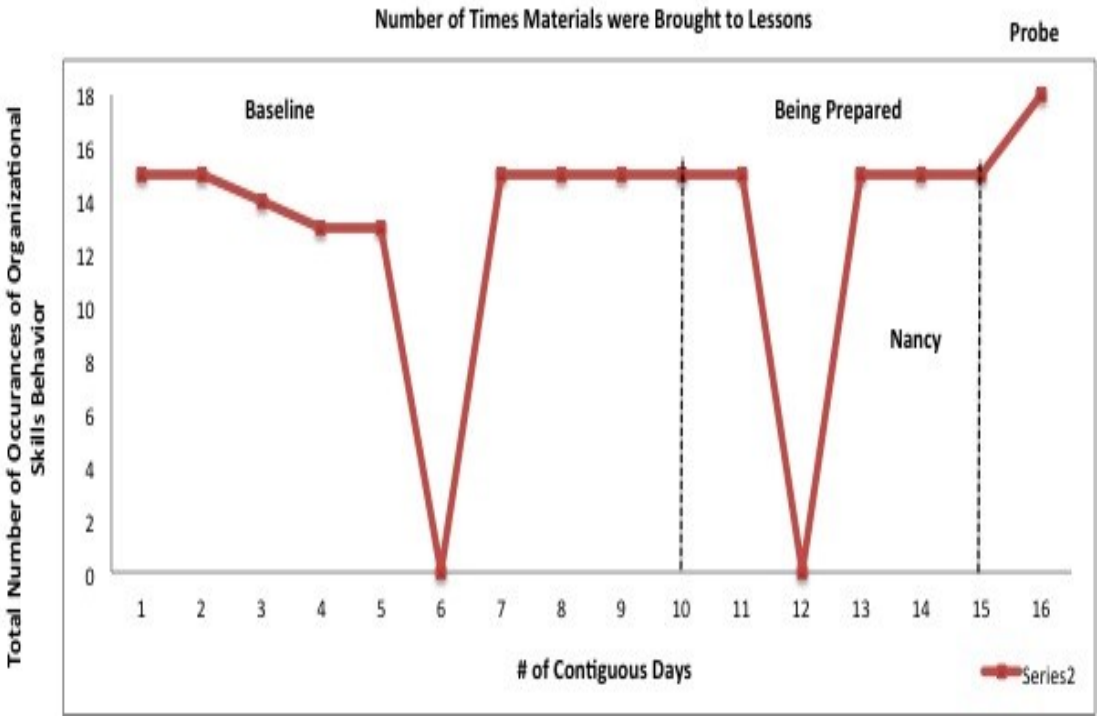
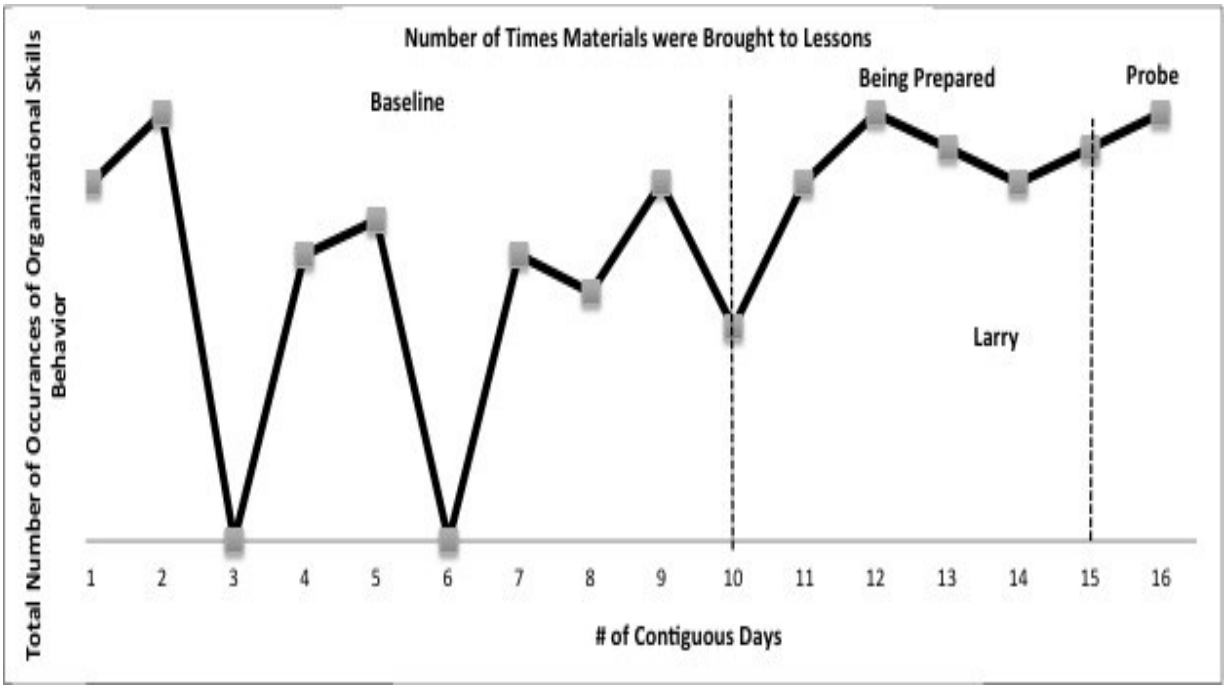


Figure 6 illustrates Larry's performance during baseline and the Being Prepared lessons. He received 5 days of the intervention after 10 baseline sessions. On day one of baseline, Larry brought his materials to lessons 10 out of 18 times. On day two of baseline, Larry brought his materials 12 out of 18 times. Larry was absent on the third day of baseline. On the fourth day of baseline, Larry brought his materials to lessons 8 out of 18 times. Larry brought his materials to lessons 9 out of 18 times on the fifth day of baseline. On the sixth day of baseline Larry was absent. On the seventh day of baseline, Larry brought his materials to lessons 8 out of 18 times. On the eighth day of baseline, Larry brought his materials to lessons 7 out of 18 times. On the ninth day of baseline, Larry brought his material to lessons 10 out of 18 times. On the tenth day of baseline, Larry brought his materials to lessons 6 out of 18 times.

On the first day of the intervention, Larry brought his materials to lessons10 out of 18 times. Larry's performance increased on the second day of the intervention. He brought his materials to lessons 12 out of 18 times. On day three of the intervention, Larry brought his materials to lessons 11 out of 18 times. On day four of the intervention, Larry brought his materials to lessons 10 out of 18 times. Larry brought his materials 11 out of 18 times on the fifth day of the intervention. Overall, the Being Prepared

Lessons increased the amount of times that Larry brought his materials to class from 6 out of 18 times to 12 out of 18 times. A probe was conducted 2 weeks after the study was completed. At the probe, Larry brought his materials to lessons 12 out of 18 times.

Figure 6



Research Question 2. Will students who receive the DS package keep a more organized notebook as measured by the amount of times that papers were placed in the correct folders?

Figure 7 illustrates the students in Cohort 1's performance during baseline and the Organizing a Notebook Lessons. The students in Cohort 1 remained in baseline for 5 days. The overall amount of occurrences that Cohort 1 kept a more organized notebook as measured by the amount of times that papers were placed in the correct folders increased from 3 and 11 out of 18 times to 6 and 14 out of 18 times.

Figure 7

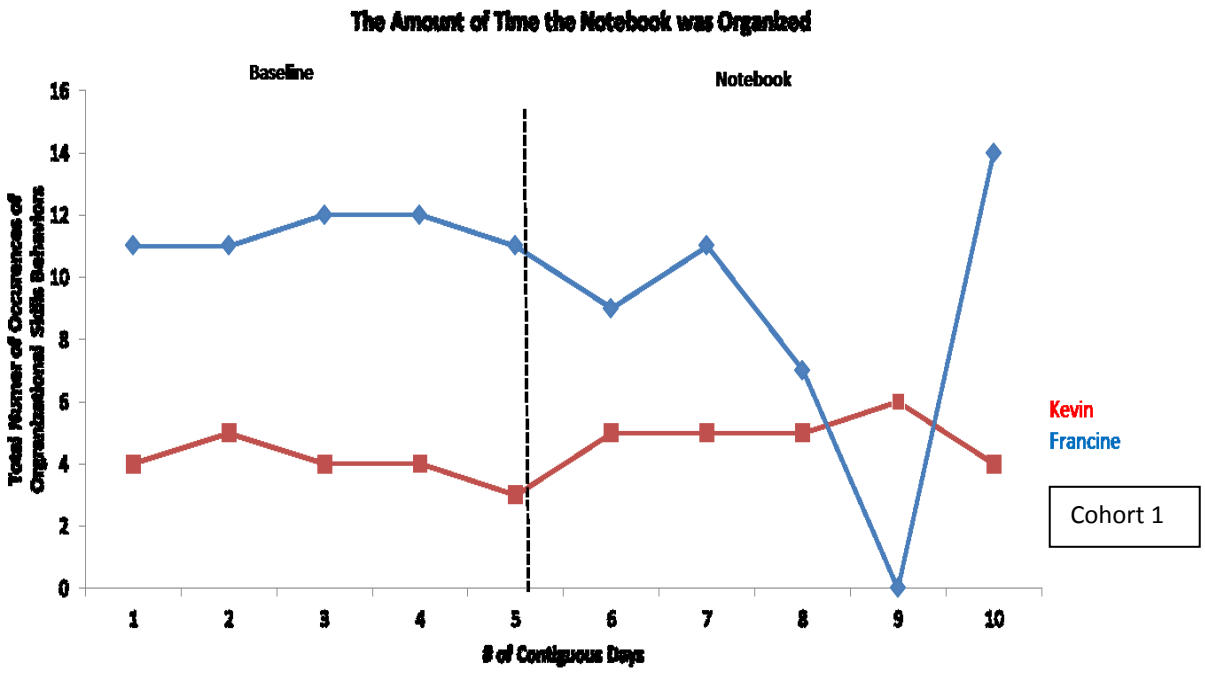


Figure 8 illustrates the students in Cohort 2's performance during baseline and the Organizing a Notebook Lessons. The students in Cohort 2 remained in baseline for 5 days. The overall amount of occurrences that Cohort 2 kept a more organized notebook as measured by the amount of times that papers were placed in the correct folders increased from 9 and 12 out of 18 times to 15 out of 18 times.

Figure 8

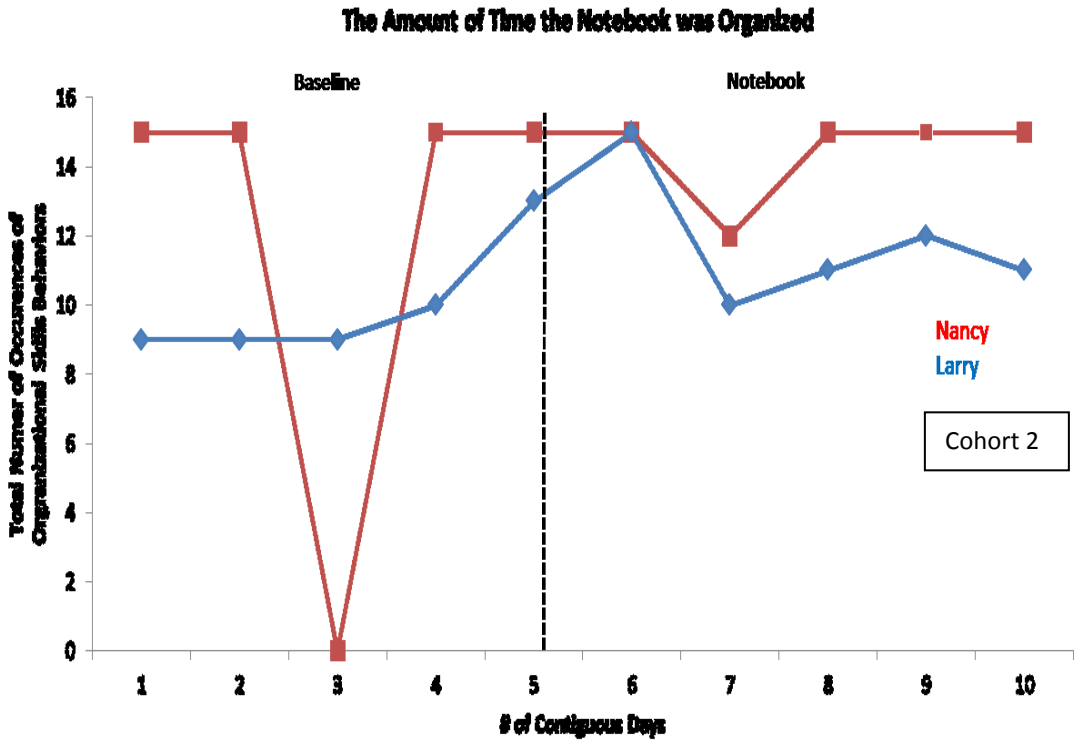


Figure 9 illustrates Kevin's performance during baseline and the Organizing a Notebook lessons. He received 5 days of the intervention after 5 days of baseline sessions. On day one of baseline, Kevin kept a notebook with papers in folders 4 out of 18 times. On day two of baseline, he kept notebook with papers in folders 5 out of 18 times. On days three and four of baseline, Kevin kept a notebook with papers in folders 4 out of 18 times. On day five of baseline, he kept a notebook with papers in folders 3 out of 18 times.

During days one through three of the intervention, Kevin kept a more organized notebook as measured by the amount of time his papers were placed in the correct folder 5 out of 18 times. On day four of the intervention, he kept a more organized notebook as measured by the amount of time his papers were placed in the correct folder 6 out of 18 times. On the fifth day of the intervention, Kevin kept a more organized notebook as measured by the amount of time his papers were placed in the correct folder 4 out of 18 times. The Organizing a Notebook lessons increased the amount of time that Kevin's papers were placed in the correct folders resulting in an organized notebook from 3 out of 18 times to 6 out of 18

times. A probe was conducted 2 weeks after the study was completed. At the probe, Kevin kept a more organized notebook as indicated by the amount of time his papers were placed in the correct folder 6 out of 18 times.

Figure 9

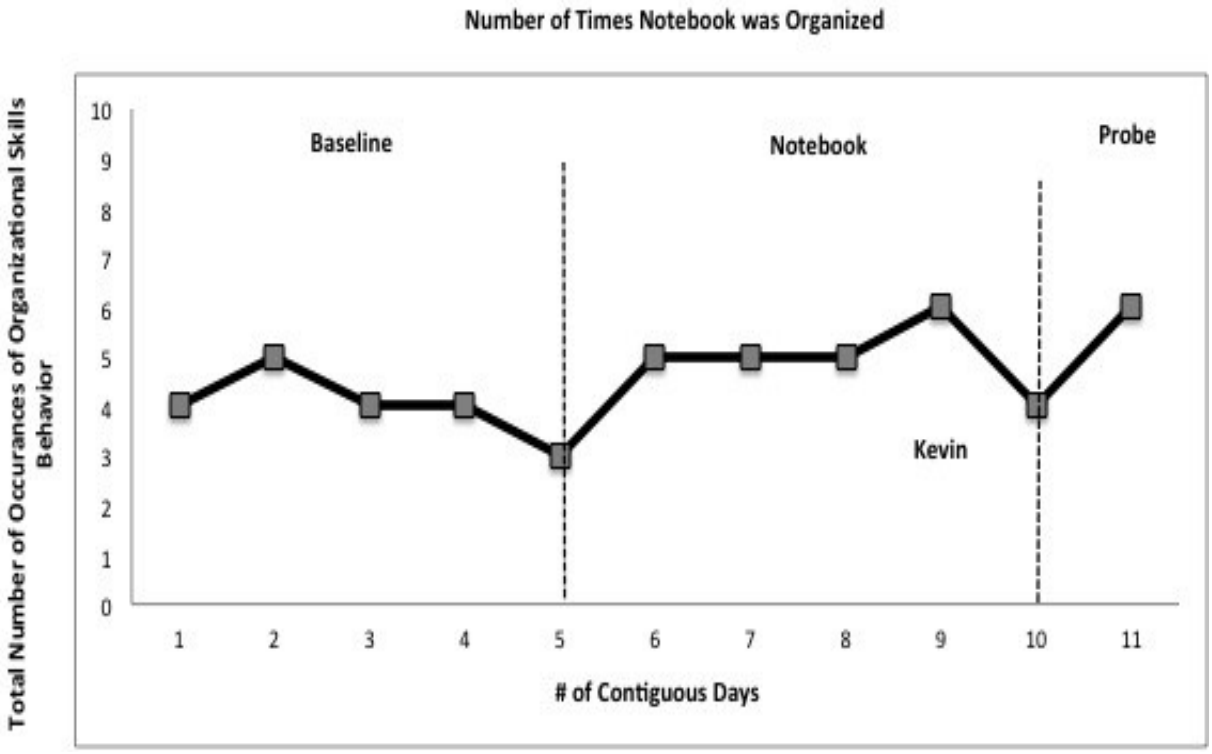


Figure 10 illustrates Francine's performance during baseline and the Organizing a Notebook lessons. She received 5 days of the intervention after 5 days of baseline sessions. On days one and two of baseline, Francine kept a notebook with papers in folders 11 out of 18 times. On days three and four of baseline, she kept a notebook with papers in folder 4 out of 18 times. On day five of baseline, Francine kept a notebook with papers in folders 11 out of 18 times.

During day one of the intervention, Francine kept a more organized notebook as measured by the amount of time her papers were placed in the correct folder 9 out of 18 times. On day two of the intervention, she kept a more organized notebook as measured by the amount of time her papers were placed in the correct folder 11 out of 18 times. On day three of the intervention, Francine kept a more

organized notebook as measured by the amount of time her papers were placed in the correct folder 7 out of 18 times. On day four of the intervention, she was absent. On the fifth day of the intervention, Francine kept a more organized notebook as measured by the amount of time her papers were placed in the correct folder 14 out of 18 times. The Organizing a Notebook lessons increased the amount of time that Francine's papers were placed in the correct folders resulting in an organized notebook from 9 out of 18 times to 14 out of 18 times. No probe data was collected for Francine because she transferred to another school a week after she completed the Organizing a Desk lessons.

Figure 10

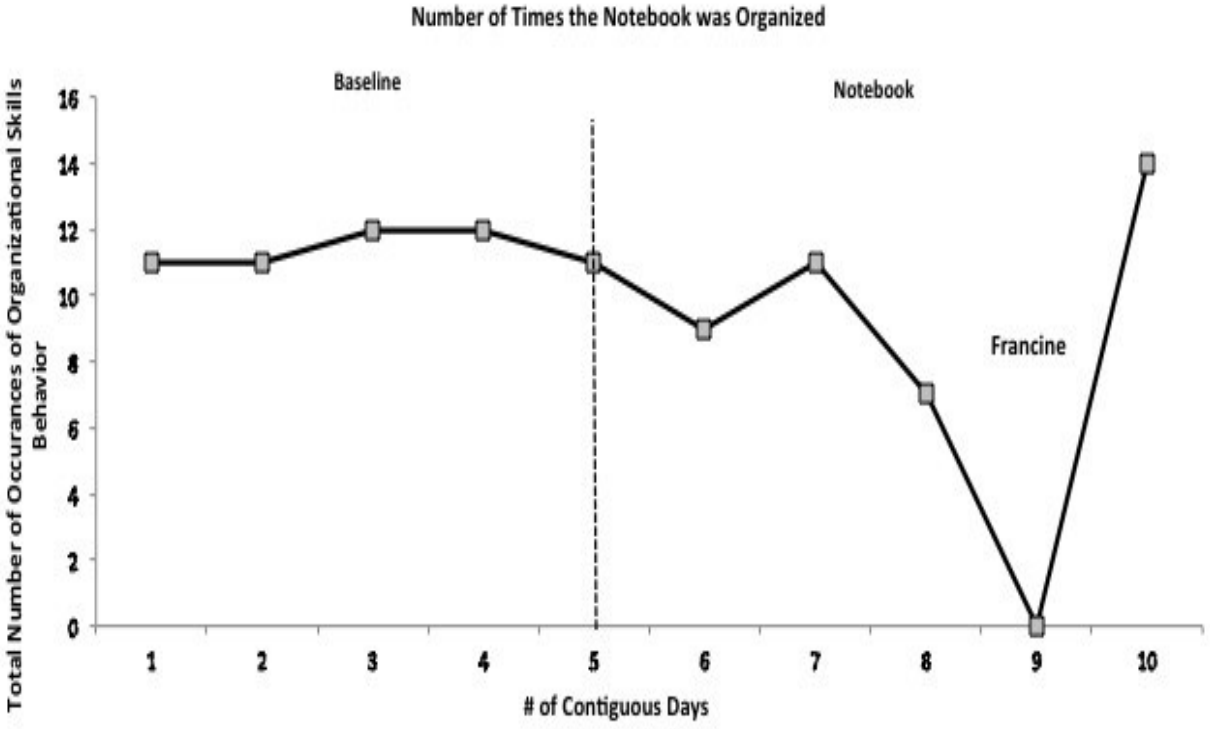


Figure 11 illustrates Nancy's performance during baseline and the Organizing a Notebook lessons. She received 5 days of the intervention after 5 days of baseline sessions. On days one and two of baseline, Francine kept a notebook with papers in folders 15 out of 18 times. She was absent on day three of baseline. On days four and five of baseline, Nancy kept a notebook with papers in folder 15 out of 18 times.

During day one of the intervention, Nancy kept a more organized notebook as measured by the amount of time her papers were placed in the correct folder 15 out of 18 times. On day two of the intervention, she kept a more organized notebook as measured by the amount of time her papers were placed in the correct folder 12 out of 18 times. On days three through five of the intervention, Nancy kept a more organized notebook as measured by the amount of time her papers were placed in the correct folder 15 out of 18 times. The Organizing a Notebook lessons had no effect on increasing the amount of times that Nancy's papers were placed in the correct folders resulting in an organized notebook. A probe was collected 2 weeks after the study was completed. At the probe, Nancy kept a more organized notebook as measured by the amount of time her papers were placed in the correct folder 18 out of 18 times.

Figure 11

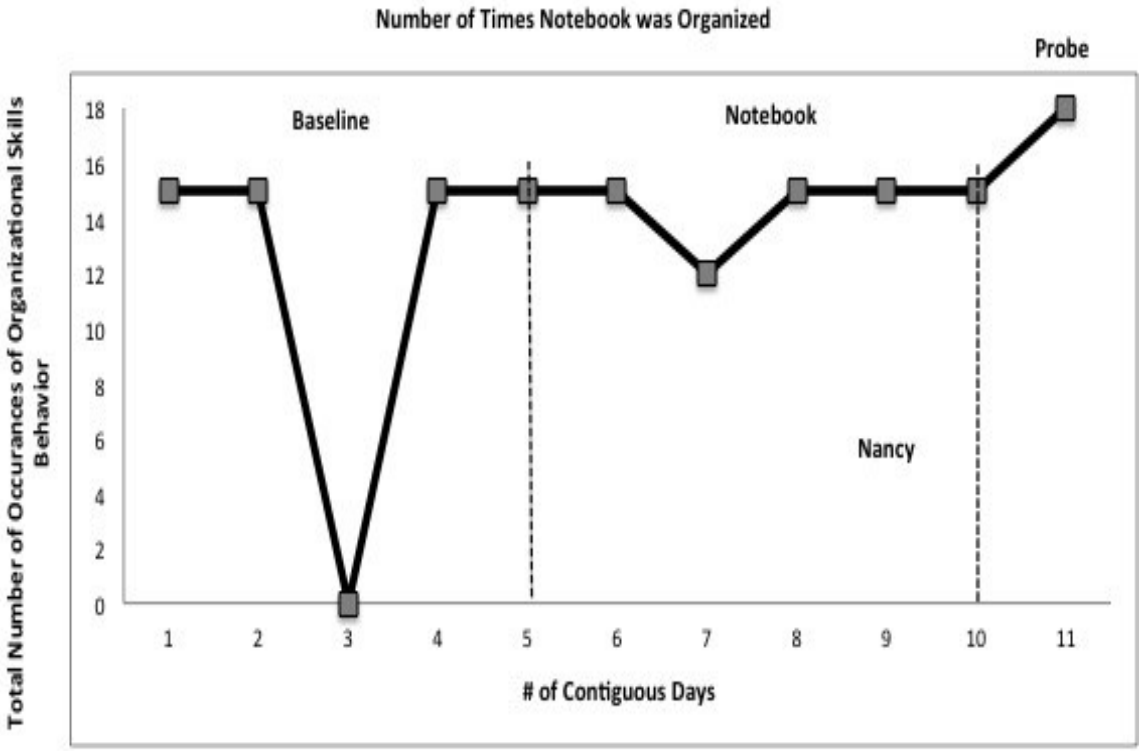
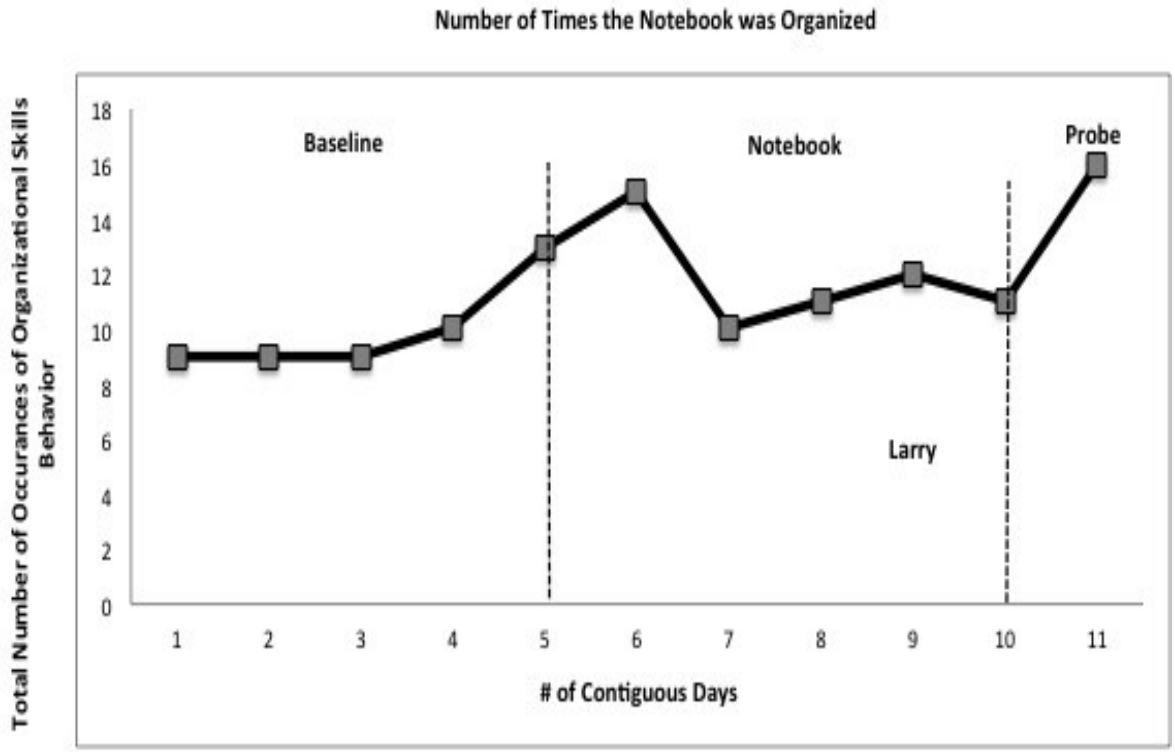


Figure 12 illustrates Larry's performance during baseline and the Organizing a Notebook lessons. He received 5 days of the intervention after 5 days of baseline sessions. On day one through three of

baseline, Larry kept a notebook with papers in folders 9 out of 18 times. On day four of baseline, he kept a notebook with papers in folders 10 out of 18 times. On day five of baseline, Larry kept a notebook with papers in folders 13 out of 18 times.

During day one of the intervention, Larry kept a more organized notebook as measured by the amount of time his papers were placed in the correct folder 15 out of 18 times. On day two of the intervention, he kept a more organized notebook as measured by the amount of time his papers were placed in the correct folder 10 out of 18 times. On day three of the intervention, Larry kept a more organized notebook as measured by the amount of time his papers were placed in the correct folder 11 out of 18 times. On day four of the intervention, he kept a more organized notebook as measured by the amount of time his papers were placed in the correct folder 12 out of 18 times. On the fifth day of the intervention, Larry kept a more organized notebook as measured by the amount of time his papers were placed in the correct folder 11 out of 18 times. The Organizing a Notebook lessons increased the amount of times that Larry's papers were placed in the correct folders resulting in an organized notebook from 9 out of 18 times to 15 out of 18 times. A probe was collected 2 weeks after the study was completed. At the probe, Larry kept a more organized notebook as measured by the amount of times that his papers were placed in the correct folders 16 out of 18 times.

Figure 12



Research Question 3. Will students who receive the DS package keep a more organized desk as measured by the amount of time that materials were placed in the desk according to the desk map?

Figure 13 illustrates the students in Cohort 1's performance during baseline and the Organizing a Desk Lessons. The students in Cohort 1 remained in baseline for 5 days. Both students demonstrated an increase in the amount of time that materials were placed in the desk according to the desk map on days two and three of the intervention. The overall amount of occurrences that Cohort 1 kept a more organized desk as measured by the amount of time that materials were placed in the desk according to the desk map increased from 4 and 9 out of 18 times to 9 and 12 out of 18 times.

Figure 13

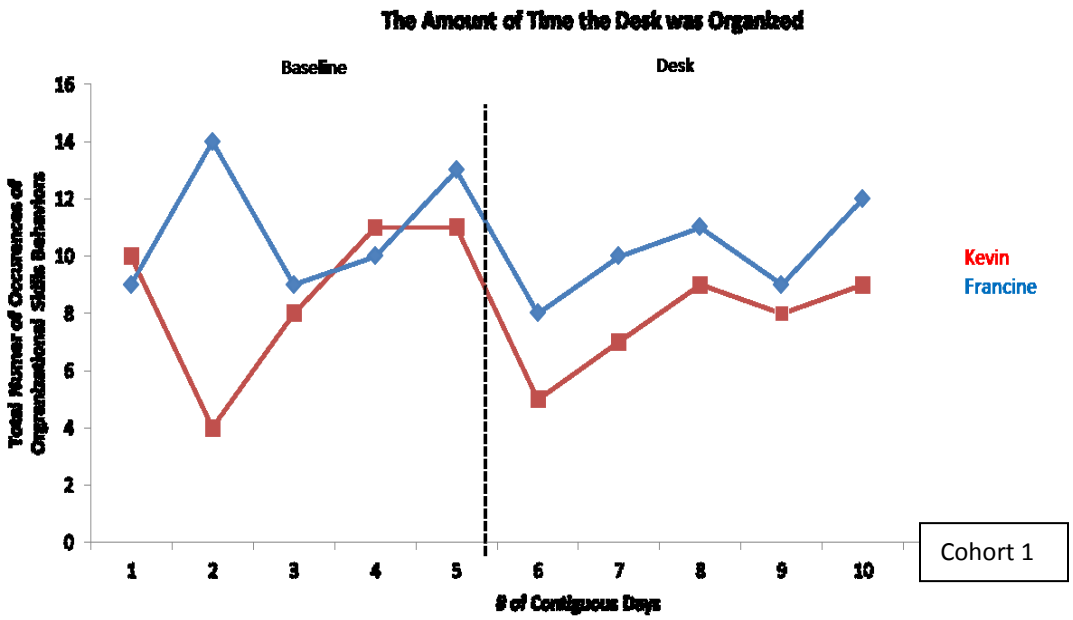


Figure 14 illustrates the students in Cohort 2's performance during baseline and the Organizing a Desk Lessons. The students in Cohort 2 remained in baseline for 5 days. Both students demonstrated an increase in the amount of time that materials were placed in the desk according to the desk map on days two and three of the intervention. The overall amount of occurrences that Cohort 2 kept a more organized desk as measured by the amount of time that materials were placed in the desk according to the desk map increased from 10 and 15 out of 18 times to 17 and 18 out of 18 times.

Figure 14

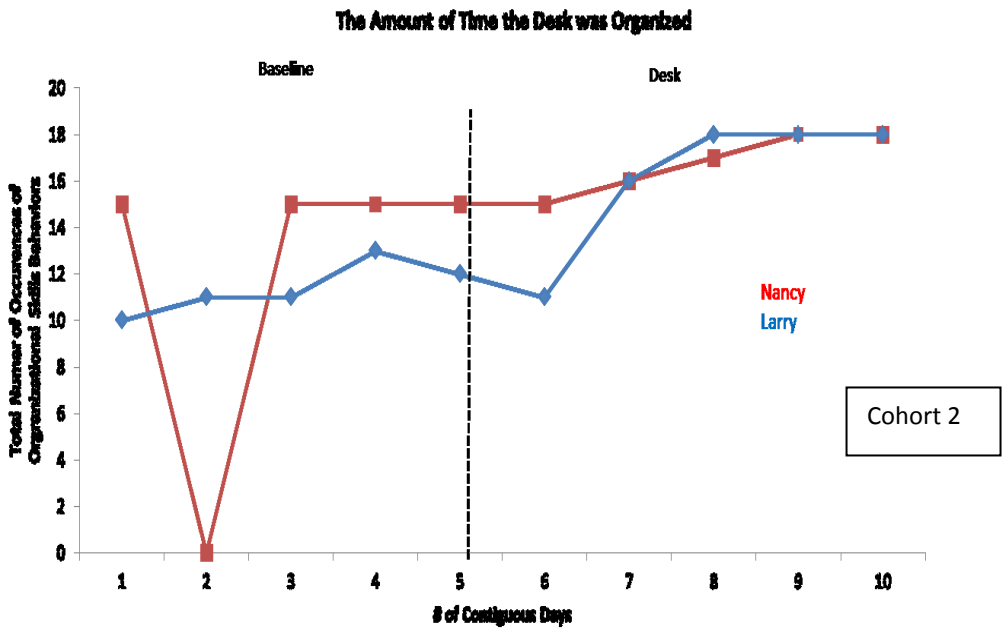


Figure 15 illustrates Kevin's performance during baseline and the Organizing a Desk lessons. He received 5 days of the intervention after 5 days of baseline sessions. On day one of baseline, Kevin had papers placed in his desk 10 out of 18 times. On day two of baseline, Kevin had papers placed in his desk 4 out of 18 times. On day three of baseline, Kevin had papers placed in his desk 8 out of 18 times. On days four and five of baseline, Kevin had papers placed in the desk 11 out of 18 times.

During day one of the intervention, Kevin kept a more organized desk as measured by the amount of time materials were placed in the desk according to the desk map 5 out of 18 times. On day two of the intervention, he kept a more organized desk as measured by the amount of time materials were placed in the desk according to the desk map 7 out of 18 times. On day three of the intervention, Kevin kept a more organized desk as measured by the amount of time materials were placed in the desk according to the desk map 9 out of 18 times. On day four of the intervention, he kept a more organized desk as measured by the amount of time materials were placed in the desk according to the desk map 8 out of 18 times. On the fifth day of the intervention, Kevin kept a more organized desk as measured by the amount of time materials were placed in the desk according to the desk map 9 out of 18 times. The Organizing a Desk lessons increased the amount of time that Kevin's materials were placed in the desk according to the desk

map from 4 out of 18 times to 9 out of 18 times. A probe as conducted 2 weeks after the study was completed. At the probe, Kevin kept a more organized desk as measured by the amount of time his materials were placed in the desk according to the desk map 8 out of 18 times.

Figure 15

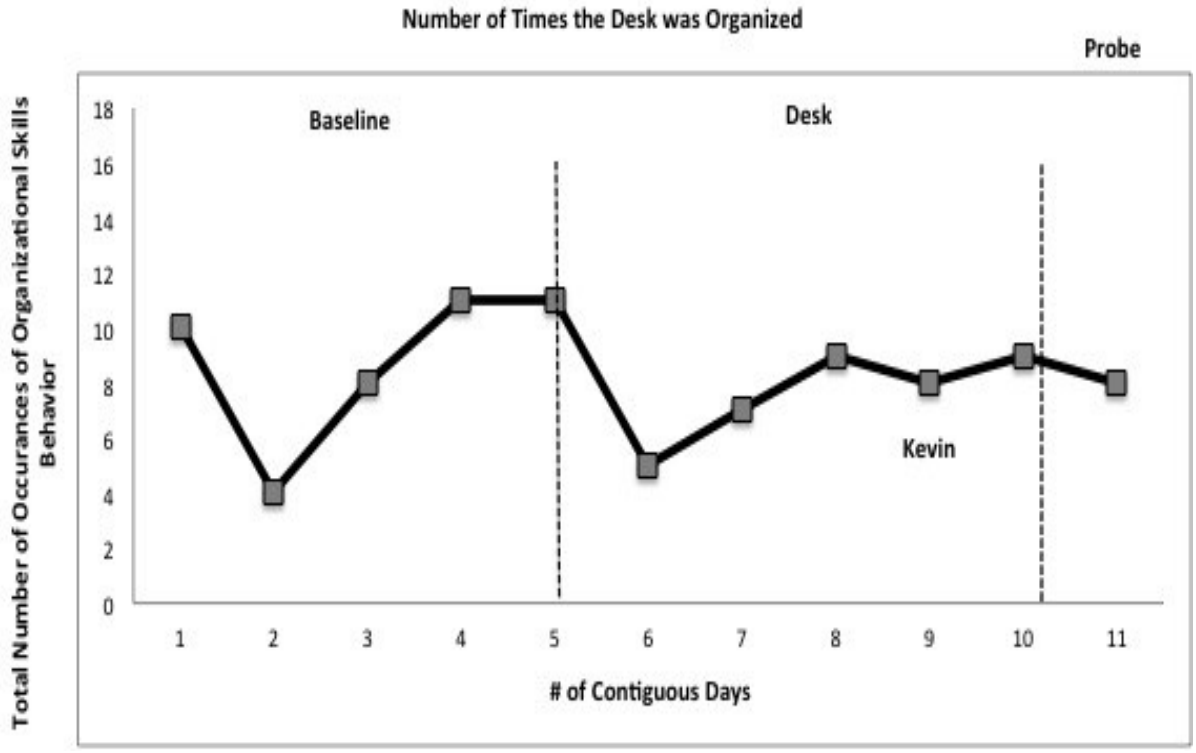


Figure 16 illustrates Francine's performance during baseline and the Organizing a Desk lessons. She received 5 days of the intervention after 5 days of baseline sessions. On day one of baseline, Francine had papers placed in her desk 9 out of 18 times. On day two of baseline, Francine had papers placed in her desk 14 out of 18 times. On day three of baseline, Francine had papers placed in her desk 9 out of 18 times. On day four of baseline, Francine had papers placed in her desk 10 out of 18 times. On day five of baseline, Francine had papers placed in her desk 13 out of 18 times.

During day one of the intervention, Francine kept a more organized desk as measured by the amount of time materials were placed in the desk according to the desk map 8 out of 18 times. On day two of the intervention, she kept a more organized desk as measured by the amount of time materials

were placed in the desk according to the desk map 10 out of 18 times. On day three of the intervention, Francine kept a more organized desk as measured by the amount of time materials were placed in the desk according to the desk map 11 out of 18 times. On day four of the intervention, she kept a more organized desk as measured by the amount of time materials were placed in the desk according to the desk map 9 out of 18 times. On the fifth day of the intervention, Francine kept a more organized desk as measured by the amount of time materials were placed in the desk according to the desk map 12 out of 18 times. The Organizing a Desk lessons increased the amount of time that Francine's materials were placed in the desk according to the desk map from 9 out of 18 times to 12 out of 18 times. No probe data was collected for Francine because she transferred to another school a week after she completed the Organizing a Desk lessons.

Figure 16

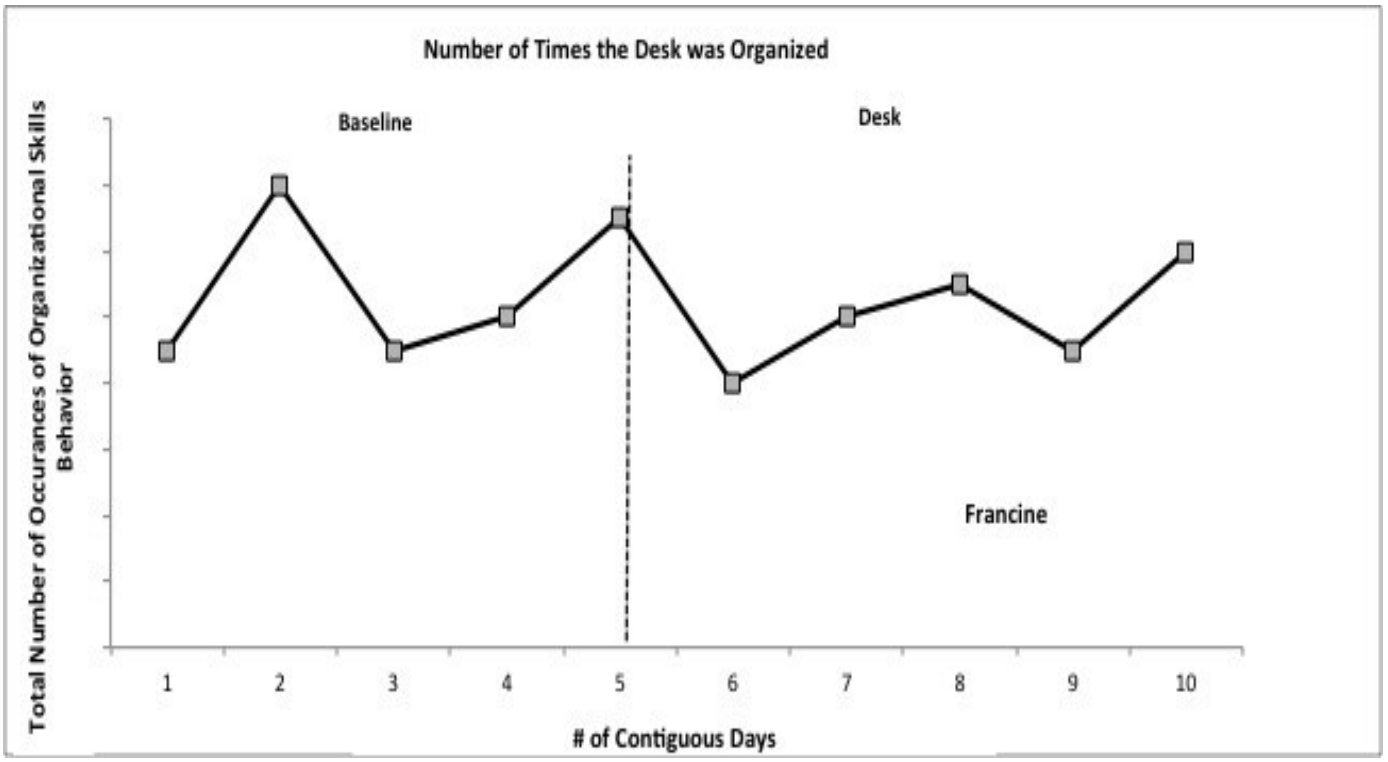


Figure 17 illustrates Nancy's performance during baseline and the Organizing a Desk lessons. She received 5 days of the intervention after 5 days of baseline sessions. On day one of baseline, Nancy had papers placed in her desk 15out of 18 times. Nancy was absent on day two of baseline. On days three through five of baseline, Nancy had papers placed in her desk 15 out of 18 times.

During day one of the intervention, Nancy kept a more organized desk as measured by the amount of time materials were placed in the desk according to the desk map 15 out of 18 times. On day two of the intervention, she kept a more organized desk as measured by the amount of time materials were placed in the desk according to the desk map 16 out of 18 times. On day three of the intervention, Nancy kept a more organized desk as measured by the amount of time materials were placed in the desk according to the desk map 17 out of 18 times. On days four and five of the intervention, she kept a more organized desk as measured by the amount of time materials were placed in the desk according to the desk map 18 out of 18 times. The Organizing a Desk lessons increased the amount of time that Nancy's materials were placed in the desk according to the desk map from 15 out of 18 times to 18 out of 18 times. A probe was conducted 2 weeks after the study was completed. At the probe, Nancy kept a more organized desk as measured by the amount of time that papers were placed in the desk according to the desk map 18 out of 18 times.

Figure 17

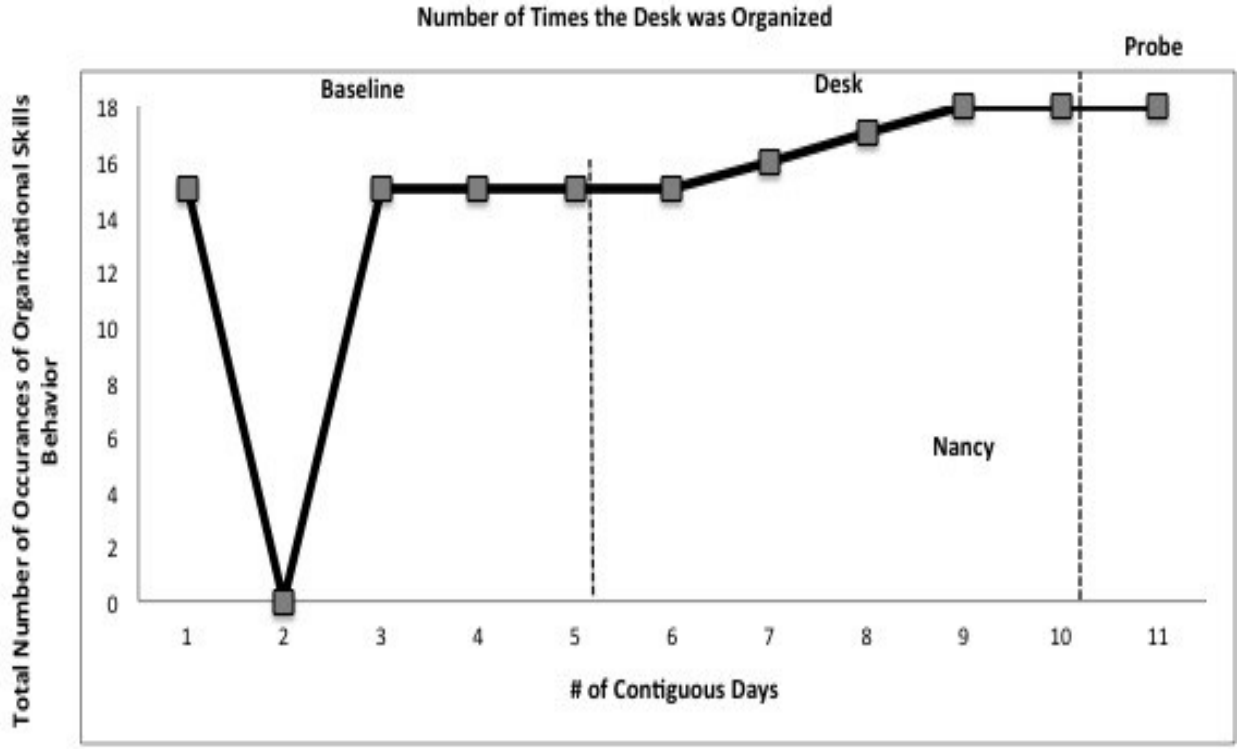


Figure 18 illustrates Larry's performance during baseline and the Organizing a Desk lessons. He received 5 days of the intervention after 5 days of baseline sessions. On day one of baseline, Larry had papers placed in his desk 10 out of 18 times. On days two and three of baseline, he had papers placed in his desk 11 out of 18 times. On day four of baseline, Larry had papers placed in the desk 11 out of 18 times. On day five of baseline, Larry had papers placed in the desk 12 out of 18 times.

During day one of the intervention, Larry kept a more organized desk as measured by the amount of time materials were placed in the desk according to the desk map 11 out of 18 times. On day two of the intervention, he kept a more organized desk as measured by the amount of time materials were placed in the desk according to the desk map 16 out of 18 times. On days three through five of the intervention, Larry kept a more organized desk as measured by the amount of time materials were placed in the desk according to the desk map 18 out of 18 times. The Organizing a Desk lessons increased the amount of time that Larry's materials were placed in the desk according to the desk map from 10 out of 18 times to 18 out of 18 times. A probe was conducted 2 weeks after the study was completed. At the probe, Larry

kept a more organized desk as measured by the amount of time that papers were placed in the desk according to the desk map 18 out of 18 times.

Figure 18

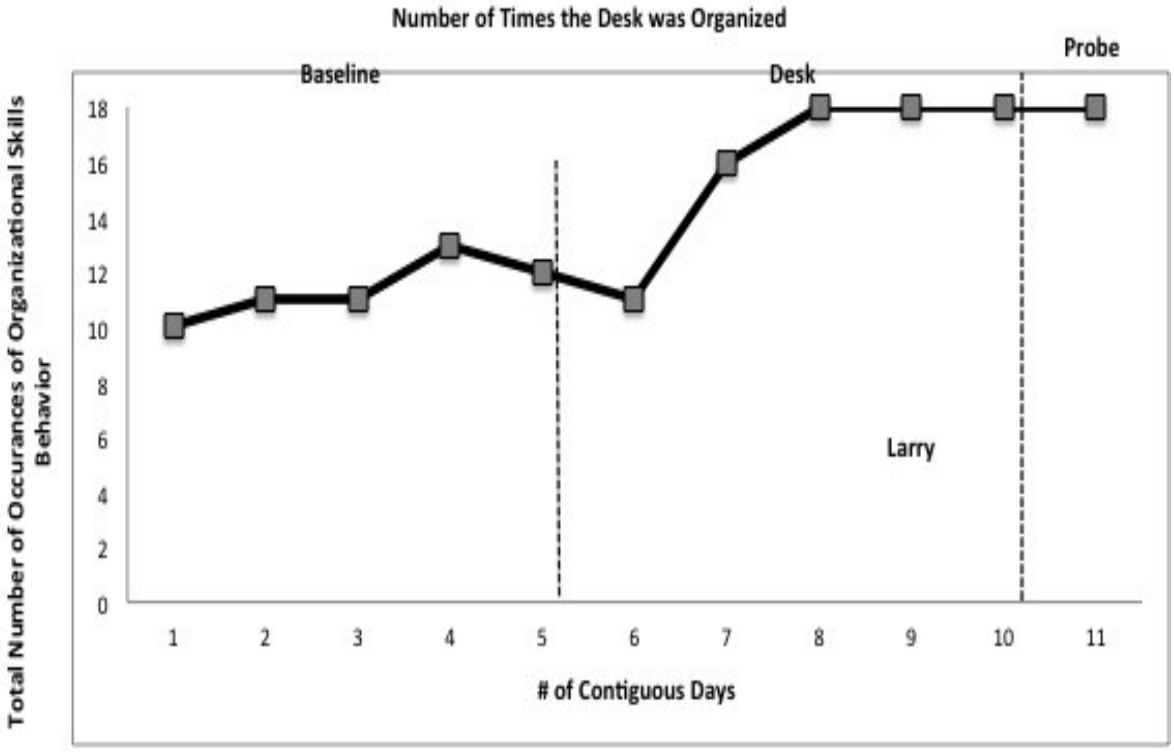


Figure 19 depicts OSBI data that was collected for each participant prior to and after the intervention. Kevin's pretest OSBI score was 1. After receiving the intervention, Kevin's post OSBI increased by 1 point to a 2. A post OSBI score was not collected for Francine due to her transferring to another school a week after completing the Organizing a Desk Lessons. Nancy's pretest OSBI score was a 1.92. After receiving the intervention, Nancy's post OSBI score increased by 2.22 points to 4.23. Larry's pretest OSBI score was 1.76. After receiving the intervention, Larry's post OSBI score increased by 1.85 points to a 3.61.

Figure 19

Subject	Pre OSBI Scores	Post OSBI Scores
Kevin	1	2
Francine	1.18	-----
Nancy	1.92	4.23
Larry	1.76	3.61

Summary

The results of this study contributed to the body research by providing data on the effectiveness of using Direct Instruction and Self-Management to teach elementary students with ADHD and LD organizational skills. General Education Teachers collected data, on a daily basis, using an Organizational Skills Time Sampling Sheet to determine the occurrence of, identified, organizational skills behaviors (e.g., bringing materials to class, organizing a notebook, and organizing a desk). Data from the OSTSS, provided information on the usefulness of the organizational skills scripted lessons. Based on this data, additional research needs to be conducted to determine the, true, effectiveness of teaching organizational skills at the elementary level. The implications and limitations of the study along with recommendations for future research will be discussed in chapter 5.

Chapter Five

Results

The purpose of this study was to evaluate the effectiveness of an instructional package consisting of direct instruction and self-management on the organizational skills of 4 elementary school students with organizational impairments. A multiple baseline design across participants demonstrated that direct instruction and self-management improved the combined organizational skills (e.g., bringing materials to class, organizing a notebook, and organizing a desk) of the 4 participants. This chapter provides the following information: a discussion of the research questions, including teacher and students comments; limitations; strengths; and implications for future research.

Previous research indicates that students with LD and ADHD regularly attend class unprepared and do not bring the necessary materials to class (e.g., books, notebooks, paper, pencil, etc.) (DuPaul & Stoner, 2003). Students with LD and ADHD often lose pencils, misplace papers, and encourage other classroom interruptions that needn't occur. These students often neglect to separate notebooks into various subject areas, forget to bring necessary items to class, and stuff assignments randomly into their book bags and pockets. Moreover, these students' disorganization, including their inability to keep track of assignments and turn them in on time, contributes to low grades and academic failure (Anderson, 2008; Gambil, 2008; Steele, 2007). The areas of being prepared for lessons, organizing a notebook, and organizing a desk were specifically examined in the present study and were found to be positively impacted by direct instruction and self-management.

The data was gathered via the Organizational Skills Behavior Indicator (OSBI) and the Organizational Skills Time Sampling Sheet (OSTSS). This data was collected to answer the study's research questions. The following items will be addressed: a discussion of the research questions, including teacher and students comments; limitations; strengths; and implications for future research.

Discussion of the Research Questions

Research Question 1

Research question number 1 was: Will students who receive the DS package increase the amount of occurrences that they bring materials (e.g., paper and pencil) to lessons?

Research question 1 examined whether direct instruction and self-management helped to increase the amount of occurrences that students brought materials to lessons. The findings for research question 1, for each participant are discussed below.

Kevin, age 7, achieved an overall score 5 out of 18 for bringing his materials to lessons. Prior to receiving the intervention, his challenges were, consistently, bringing and using the following: pencil, paper, and textbooks to lessons. His teacher indicated that, despite having pencils, Kevin would comment that he couldn't complete his assignments. She, also, indicated that Kevin would, often, play with his pencils during lessons. During the Being Prepared lessons, Kevin asked for assistance in organizing his pencils. As Kevin was practicing completing the OSF, he stated, "I need my work and materials to be prepared for class." After the intervention, Kevin's teacher shared that he brought a pencil to lessons more frequently and began initiating tasks. She also shared the Kevin began placing his paper and textbooks on the desk before starting his lessons.

Francine, age 9, achieved an overall score 11 out of 18 for bringing her materials to lessons. Prior to receiving the intervention, Francine's teacher indicated that her challenges were, consistently, bringing paper and pencil to lessons. During the Being Prepared lessons, Francine stated, "The OSF will help me to remember to bring my pencils to class because I sometimes forget." Francine's performance, after the intervention, was not collected due to Francine transferring to another school a week after completing the Organizing a Desk Lessons.

Nancy, age 9, achieved an overall score of 15 out of 18 for bringing her materials to lessons. Prior to receiving the intervention, her teacher indicated that her challenges were, inconsistently, bringing paper and pencil to lessons. During the Bering Prepared lesson, Nancy commented, "Kids should keep their

papers organized so that they don't lose their homework." After the intervention, Nancy's teacher commented that Nancy consistently brought her materials to lessons and was eager to complete assignments.

Larry, age 11, achieved an overall score of 12 out of 18 for bringing his materials to lessons. Prior to receiving the intervention, his teacher indicated that his challenges were, bringing pencils and paper to lessons. Larry would ask for a pencil and paper when the lesson had already begun. During the Being Prepared lessons, Larry commented, "You need your books and special notes to be prepared to study and be prepared for class." After the intervention, Larry's teacher commented that Larry consistently brought paper, pencil, and textbooks to class and offered to share pencils with other students who didn't have them.

The data for Kevin was somewhat more variable than Francine's. The initial phase from baseline to the intervention indicated immediate effects, however, Kevin's performance decreased during the last two days of the intervention. Francine's performance was similar to Kevin's in that the initial phase from baseline to the intervention indicated immediate effects. Francine performance, on the other hand, was different because her performance during the intervention increased as compared to Kevin's. Kevin's improvement in initiating and attending to task is consistent with Paulsen's findings. Paulsen (2013) found that students who self-manage tend to adhere to instructions and focus on work. Additionally, the teaching of self-management strategies seem to be promising in the treatment of disabilities such as ADHD, as this improves on-task behavior and academic accuracy (Gawrilow et al., 2011).

Although Francine was not in the same cohort as Nancy and Larry, her performance during the intervention was very similar to that of Nancy and Larry's. They all demonstrated clear and systematic improvement in bringing their materials to lessons. The initial phase from baseline to the intervention for Francine, Nancy, and Larry indicated immediate effects. Francine, Nancy, and Larry were older than Kevin. This finding indicates that age may play a factor in how well students obtain organizational skills. Moreover, it may be better to teach organizational skills to elementary students at the intermediate level.

In addition, Francine's and Larry's results supports Paulsen's claim that students with LD benefit from self-managements strategies. Paulsen (2013) stated that students with LD must develop self-management skills in order to become independent learners. Steel (2008) emphasizes that the incorporation of explicit instruction can provide structure and support for students with LD who have organizational, attention, and memory deficits. Kevin and Nancy's performance was consistent with Gawrilow's findings. Gawrilow (2011) stated that teaching self-management strategies seem to be promising in the treatment of ADHD, as this improves on task behavior.

The performances of all four participants were consistent with Rafferty's findings. Rafferty (2010) found that teaching students to self-manage organizational behaviors may provide immediate reinforcement for increasing organizational skills. For instance, Rafferty (2010) stated that students who use self-management skills tend to have higher levels of self-efficacy, motivation, and student achievement. Moreover, Rafferty (2010) stated that students with LD and ADHD have been successful in using self-management interventions and have become more independent in terms of regulating academic and social behaviors.

Research Question 2

Research question number two was: Will students who received the DS package keep a more organized notebook as measured by the amount of times that papers were placed in the correct folders?

Research question 2, examined whether direct instructional and self-management helped students to keep a more organized notebook as measured by the amount of times that paper and pencil were placed in the correct folders. The discussion of question 2, for each participant, follows.

Kevin achieved an overall score of 6 out of 18 for keeping an organized notebook as measured by the amount of times that papers were placed in the correct folder. Prior to the intervention, Kevin's teacher indicated that he constantly lost assignments and that his papers were hanging out of his notebook. During the Organizing a Notebook lessons, Kevin commented, "An organized notebook should have pencil, paper, scissors, and work in it. A person who doesn't keep an organized notebook can't find things." After the intervention, Kevin's teacher commented that he improved in terms of keeping folders

and papers, orderly, in his notebook. Kevin's teacher also mentioned that Kevin offered to help some of his classmates organize their notebooks.

Francine achieved an overall score of 14 of out of 18 for keeping an organized notebook as measured by the amount of times that papers were placed in the correct folder. Prior to the intervention, Francine's teacher indicated that Francine had challenges separating her papers according to subject in her notebook. Francine's teacher, also, mentioned that Francine placed papers in her notebook in no apparent order and did not have folders for specific subjects in her notebook. During the Organizing a Notebook lessons, Francine commented, "If your notebook is unorganized, you will have missing notes." She also commented, "You can find your work easier if your notebook is organized." Francine's performance, after the intervention, was not measured due to Francine transferring to another school a week after completing the Organizing a Desk lessons.

Nancy achieved an overall score of 15 out of 18 for keeping a more organized notebook as measured by the amount of times that her papers were placed in the correct folders. Prior to the intervention, Nancy's teacher indicated that Nancy papers were placed neatly in her notebook; however, they were not separated according to subject. As a result, it took Nancy longer to locate her papers. During the Organizing a Notebook lessons, Nancy stated, "Keeping an organized notebook helps you to locate things and get good grades." She also made a real life connection by relating the importance of keeping an organized notebook to job success. Nancy stated, "If a person is not organized, then they're not serious about their job or work." After the intervention, Nancy's teacher indicated that Nancy's notebook was more organized due to learning the color coded system and that she was able to locate papers quicker.

Larry achieved an overall score of 15 out of 18 for keeping a more organized notebook as measured by the amount of times that his papers were placed in the correct folders. Prior to receiving the intervention, Larry had significant difficulty in keeping his papers, for all subjects, in the correct folder. His teacher commented that Larry had difficulty locating assignments. During the Organizing a Notebook lessons, Larry stated, "Keeping an organized notebook looked nice and neat." He also made a real life connection by relating the importance of keeping an organized notebook to being successful at work.

Larry commented, "A person could lose their job, if that person is working on a project and they have trouble keeping and finding the papers that are a part of the project." Larry's teacher commented that Larry began using his free time to organize his notebook and papers. In addition, Larry asked the researcher/special education teacher for two folders to keep his Social Studies and Special Events papers.

The data for Kevin was somewhat more consistent than Francine's. The initial phase from baseline to the intervention, for Kevin, indicated immediate effects. Kevin's performance, steadily, increased until the last day of the intervention.

Nancy and Larry, on the other hand, continued, to demonstrate clear and systematic improvement in keeping an organized notebook as indicated by the amount of times that papers were placed in the correct folder. Kevin's performance was similar to that of Nancy and Larry's. The initial phase from baseline to the intervention for Kevin, Nancy, and Larry indicated immediate effects.

Larry taking the initiative to organize his papers and notebook during his free time and requesting folders from the researcher to organize other subjects was consistent with Gureasko's findings. Gureasko (2006) found that when students with disabilities learn to self-manage, they become increasingly self-reliant in terms of decision making and empower themselves for determining areas where they desire to improve.

In addition, Nancy and Larry were able to apply their prior knowledge by linking the importance of keeping an organized notebook to job success. This finding indicates Kevin may have had less prior knowledge, due to his age, than Nancy and Larry.

Research Question 3

Research question 3 was: Will students who received the DS package keep a more organized desk as measured by the amount of time that students put materials in the desk according to the desk map? Research question 3, examined whether direct instructional and self-management helped students to keep a more desk as measured by the amount of times that materials were placed in the desk according to desk map. The findings for research question 3, for each participant, are discussed below.

Kevin achieved an overall score of 9 out of 18 for keeping an organized desk as measured by the amount of time that his materials were in his desk according to the desk map. Prior to receiving the intervention, Kevin's teacher stated that Kevin's papers were, extremely, disorganized in his desk. He had difficulty locating items in his desk due to it being cluttered. During the Organizing a Desk lessons, Kevin stated, "If a kid's desk is messy then they will lose their homework and classwork." After the intervention, Kevin's teacher commented that he improved in terms of being able to locate items in his desk.

Francine achieved an overall score of 12 out of 18 for keeping an organized desk as measured by the amount of time that her materials were in her desk according to the desk map. Prior to receiving the intervention, Francine's teacher stated that Francine would stuff papers in her desk. She had difficulty locating her assignments and items in her desk. During the Organizing a Desk lessons, Francine stated, "If I organize my desk, then I will be able to find my work and I can put more things in my desk." She also stated, "I think that the desk map will help me find things quicker." Francine's performance, after the intervention, was not collected due to Francine transferring to another school a week after completing the Organizing a Desk lessons.

Nancy achieved an overall score of 18 out of 18 keeping an organized desk as measured by the amount of time that her materials were in her desk according to the desk map. Prior to receiving the intervention, Nancy's teacher indicated that Nancy was not consistent in terms of keeping her papers neat in her desk. Nancy also had difficulty locating items in her desk. During the Organizing a Desk lessons, Nancy stated, "If your desk is not organized, you won't get good grades. Your teacher will think that you don't care about your work." After the intervention, Nancy's teacher commented that Nancy was much more consistent in term of keeping her papers neat in her desk. She also was able to retrieve items, easier, from her desk. In addition, Nancy's teacher mentioned that Nancy began showing some of her classmates how to create a desk map.

Larry achieved an overall score of 18 out of 18 for keeping an organized desk as measured by the amount of time that his materials were in his desk according to the desk map. Prior to receiving the

intervention, Larry's teacher indicated that he had trouble locating assignments due to papers and other objects being stuffed in his desk. During the Organizing a Desk lessons, Larry stated, "keeping on an organized desk shows your teachers that you are trying. Keeping an unorganized desk makes it hard to find your work." Larry also made another real life connection by relating the importance of keeping an organized notebook to being successful at work. He stated, "You need your desk to be organized so that your boss can see that you are serious about your job." After the intervention, Larry's teacher commented that the inside and outside areas of Larry's desk were much more organized. She also mentioned that Larry began spending more time studying at his desk.

Kevin and Francine's performance, during the intervention, were very similar. They both demonstrated consistent progress during the intervention. Nancy and Larry continued to demonstrate clear and systematic improvement in keeping an organized desk as measured by the amount of materials that were in the desk according to the desk map. The initial phase from baseline to the intervention for Nancy and Larry indicated immediate effects.

The performance of all four participants is consistent with Antshel's research. Antshel (2011) states that students benefit from empirically supported interventions to improve productivity and organization, such as study skills programs, peer tutoring, choice options for structured academic activities, and self-monitoring of on task behavior and organizational skills.

As a result of receiving an instructional package consisting of direct instruction and self-management, participants in both cohorts demonstrated improvement in combined organizational skills as well as classroom behavior. These findings are consistent with Smith's research. Smith emphasizes the benefits of direct instruction. Smith (2010) states that direct instruction provides the opportunity for students with organizational impairments to have organizational skills explained, taught, modeled and practiced. Self-management helps students to control their learning and behavior (Paulsen, 2013). The findings confirm that direct instruction and self-management are necessary for students with organizational impairments to be successful in school and obtain organizational skills (Greenbaum & Markel, 2001).

In addition, the results of the pre and post OSBI scores further reinforce the effectiveness of an instructional package comprising of direct instruction and self-management in teaching organizational skills to students with organizational impairments. Kevin, Nancy, and Larry's overall combined organizational skills increased as a result of receiving the intervention. Moreover, this confirms that a clear and systematic presentation of instruction (Kim & Axelrod, 2005) along with teaching students to become independent learners via self-management skills (Paulsen, 2013) prove to be beneficial to students with LD and ADHD.

Limitations

There were several limitations that should be considered when analyzing the results of this study. Although students with LD and ADHD share characteristics that are comorbid, there are still distinct differences between characteristics associated with LD and ADHD. Given the differences between LD and ADHD, generalizations from a sample of two students in each group warrant a very small sample. Placing the participants into two groups limited the ability to generalize to other populations.

Another limitation of the study was the small sample size. The study began with 4 students receiving the intervention. Although, Nancy received the first there weeks of the intervention, she didn't receive the review component and fourth week of the intervention which was the Putting It All Together lessons. There was attrition because Nancy transferred to another school one week after completing the Organizing a Desk lessons.

An additional limitation was that data examining the impact that the intervention had on the participant's academic performance was not measured. This data may/might determine whether the intervention had positive effects on the participants' classroom grades.

Strengths

The data from the probe, conducted 2 weeks after the study was completed, was the strength of the study. This indicated that the intervention had enduring effects on improving the combined organizational skills of the participants. In addition, this demonstrated that direct instruction and self-management sustained the organizational skills of the student participants. This confirms the research

that stresses the importance of students with LD and ADHD, being taught effective organizational strategies if they lack them (Reid, 2007).

Implications for Future Research

Further research is required to determine the effectiveness of direct instruction and self-management in teaching organizational skills to students with organizational impairments. This study would need to be replicated, for a longer period of time, in schools, or a district, or a state, to see the potential impact of organizational skills on instructional gains. The results of this study look promising. It would be important to replicate the effects of direct instruction and self-management on a larger sample of students other than students with LD and ADHD. For instance, this study could be conducted on struggling learners. Research indicates that instructional methods such as direct instruction, can improve the academic performance of students with LD and struggling learners (Reid, 2007). Thus, a study of this nature could further confirm the effectiveness of direct instruction and self-management as efficient strategies for teaching organizational skills.

In an effort to further investigate the effects of direct instruction and self-management, investigators should collect and examine data on the effects of this treatment across academic areas. Future researchers may want to consider extending this study by examining the intervention effect on homework and classwork completion as well the accuracy of work completed.

This study demonstrated that an instructional package consisting of direct instruction and self-management did improve the organizational skills of the 4 elementary students with organizational impairments who participated in this study. The results confirm the effectiveness of direct instruction and self-management as interventions for students who exhibit organizational impairments. The findings from this research are relevant to teachers and administrators working in elementary schools.

References

American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders, fifth edition (DSM-5). Arlington, VA: American Psychiatric Publishing.

Anderson, D.L., Watt, S.E., Noble, W, Shanley, D.C. (2012). Knowledge of attention deficit hyperactivity disorder (ADHD) and attitudes toward teaching children with ADHD: THE role of teaching experience. *Psychology in the Schools 49* (6), 511–525.

Anderson, D. H., Munk, J. H., Young, K. R., Conley, L., & Caldarella, P. (2008). Teaching organizational skills to promote academic achievement in behaviorally challenged students. *Teaching for Exceptional Children, 40(4)*, 6-13.

Anderson, S., Yilmaz, O., & Wasburn-Moses, L. (2004). Middle and high school students with learning disabilities: Practical academic interventions for general education teachers—a review of the literature. *American Secondary Education, 32*(2), 19-38.

Antshel, K. M., & Khan, F. M. (2008). Is there an increased familial prevalence of psychopathology in children with nonverbal learning disorders? *Journal of Learning Disabilities, 41*(3), 208-217.

Antshel, K.M., Eiraldi, R.B, Gordon, M., McConaughy, S.H., & Volpe, R.J. (2011). Academic and social impairments of elementary school children with attention deficit hyperactivity disorder. *School Psychology Review 40*(2), 200-225.

Baron, D. (2007). The impact of comorbid disorders on adults with adhd. Psychiatric Times 7 (10), 1-7.

Baumeister, A.A., Henderson, K., Pow, J.L., & Advokat, C. (2012). The early history of the neuroscience of attention deficit/hyperactivity disorder. *Journal of Hostory of Neurosciences, 21*, 263-279.

Beasley, C. J. (2008). Students as teachers: The benefits of peer tutoring. Retrieved from http://lsn.curtin.edu.au/tlf/tlf1997/beasley.html.

Bloomfield, V. (2010). Teaching self-management to children with adhd: improving academic success. Retrieved from archives.evergreen.edu/masterstheses/.../Bloomfield_VMIT2010.pdfm.

Boller, B. (2008). Teaching organizational skills in middle school. *The Clearing House, 81*, 169-171.

Bos, C. S., & Vaughns, S. (2006). Strategies for teaching students with learning and behavior problems (6th ed.). Boston: Pearson/Allyn & Bacon.

Bowman-Perrott, L. J., Greenwood, C. R., & Tapia, Y. (2007). The efficacy of CWPT used in secondary alternative school classrooms with small teacher/pupil ratios and students with emotional and behavioral disorders. *Education and Treatment of Children, 30*(3), 65-87.

Bryan, T., & Burnstein, K. (2004). Improving homework completion and academic performance: Lessons from special education. *Theory into Practice, 43*(3), 214-219.

Bryan, T., Burnstein, K., & Bryan, J. (2001). Students with learning disabilities: Homework problems and promising practices. *Educational Psychologist, 36* (3), 167-180.

Dincher, D., & McGuire, L. (1994). Improving student academic success and self-esteem through the use of organizational skills. (Master's, Saint Xavier University).

Donlevy, J. (2010). Direct instruction: Structured programs for student success. *International Journal of Instructional Media, 37* (3), 225-226.

DuPaul, G.J., Eckert, T.L., & Vilardo, B. (2012). The effects of school-based interventions for attention deficit hyperactivity disorder: A meta-analysis. *School Psychology Review, 41*(4), 387-412.

DuPaul, G.J., & Stoner, G. (2003). ADHD in the schools: Assessment and intervention strategies (2nd ed). New York, NY: Guilford Press.

Ellett, L. (1993). Instructional practices in mainstreamed secondary classrooms. *Journal of Learning Disabilities*, *26*, 56-64.

Engelmann, S. (2003). The benefits of direct instruction: Affirmative action at-risk students. *Association for Supervision and Curriculum Development*, 77-79.

Falkenberg, C., & Barbetta, P. (2013). The effects of a self-monitoring package on homework completion and accuracy of students with disabilities in an inclusive general education classroom. *Journal of Behavioral Education, 22* (3), 190-210.

Finstein, R. F., Yang, F. Y., & Jones, R. (2007). Build organizational skills in students with learning disabilities. *Intervention in School and Clinic, 42*(3), 174-178.

Fuchs, D., & Fuchs, L.S. (2009). Responsiveness to intervention: Multilevel assessment and instruction as early intervention and disability identification. *The Reading Teacher, 63* (3), 250-252.

Fuchs, D., Fuchs, L.S., & Compton, D.L. (2012). Smart rti: A next-generation approach to multilevel prevention. *Council for Exceptional Children, 78* (3), 263-279.

Fuchs, D., Fuchs, L.S., & Stecker, P.M. (2013). The "blurring" of special education in a new continuum of general education placements and services. *Council for Exceptional Children, 76* (3), 301-323.

Gallego, M.A., Duran, G.Z., & Reyes, E.I. (2006). It depends: A sociohistorical account of the definition and methods of identification of learning disabilities. *Teachers College Record, 108* (11), 2195-2219.

Gambill, J. M., Moss, L. A., & Vescogni, C. D. (2008). The impact of study skills and organizational methods on student achievement. Unpublished, St. Xavier University.

Gaustad, J. (1993). Peer and cross-age tutoring. *Emergency Librarian, 21*(1), 34-39.

Gawrilow, C., Gollwitzer, P.M., & Oettingen, G. (2011). If then plans benefit executive functions in children with adhd. *Journal of Social and Clinical Psychology, 30* (6), 616-646.

Gersten, R. (2001). Remembering wes baker (1928-2000). *The Journal of Special Education, 35* (2), 115-116.

Gersten, R. (2001). Direct instruction with special education students: A review of evaluation research. *The Journal of Special Education Research, 19* (1) 41-58.

Gersten, R., & Keating, T. (1987). Long-term benefits from direct instruction. *Educational Leadership,* 28-31.

Glaaser, D. J. (2008). The effects of improved classroom acoustics on the educational performance of students with attention-deficit hyperactivity disorder. (Johns Hopkins University).

Goran, L.G. & Gage, N.A. (2011). A comparative analysis of language, suspension, and academic performance of students with emotional disturbance and students with learning disabilities. *Education and Treatment of Children, 34*(4), 469-488.

Graham, L., & Bailey, J. (2007). Learning disabilities and difficulties: An Australian conspectus introduction to the special series. *Journal of Learning Disabilities, 40*(5), 386-391.

Greenbaum, J., & Markel, G. P. (2001). Helping adolescents with ADHD & learning disabilities: Ready-to-use tips, techniques, and checklists. Paramus, NJ: Center for Applied Research in Education.

Gureasko-Moore, S., DuPaul, G.J., & White, G.P. (2006). The effects of self-management in general education classrooms on the organizational skills of adolescents with ADHD. *Behavior Modification, 30* (2), 159-183.

Gureasko-Moore, S., DuPaul, G.J., & White, G.P. (2007). Self-management of classroom preparedness and homework: effects on school functioning of adolescents with attention deficit hyperactivity disorder. *School Psychology Review, 36* (4), 647-664.

Gupta, R. & Kar, B.A. (2010). Specific cognitive deficits in adhd: a diagnostic concern

in differential diagnosis. *Journal of Child and Family Studies 19*, 778–786.

Haisley, F. B., Tell, C. A., & Andrews, J. (1981). Peers as tutors in the mainstream: Trained "teachers" of handicapped adolescents. *Journal of Learning Disabilities, 14* (4), 224-238.

Hallahan, D.P. (2003). A brief history of the field of learning disabilities. The Handbook of Learning Disabilities. New York, NY : Guilford Press.

Hallahan, D.P., Keogh, B.K.., & Cruickshank, W.M. (2001). Research and global perspectives in learning disabilities: Essays in honor of William M. Cruickshank . Mahwah, N.J. : L. Erlbaum Associates.

Hendriksen, J. G. M., Keulers, E. H. H., Feron, F. J. M., Renske, W., Jones, J., & Vles, J. S. H. (2007). Subtypes of learning disabilities: Neuropsychological and behavioral functioning of 495 children referred for multidisciplinary assessment. *European Child & Adolescent Psychiatry, 16* (8), 517-524.

Hughes, C.A. (2011). Effective instructional design and delivery for teaching task-specific learning strategies to students with learning disabilities. *Focus on Exceptional Children 44* (2), 1-17.

Hughes, C. A., Ruhl, K. L., Schumaker, J. B., & Deshler, D. D. (2002). Effects of instruction in an assignment completion strategy on the homework performance of students with learning disabilities in general education classrooms. *Learning Disabilities Research and Practice, 17* (1), 1-18.

Hughes, T. A., & Fredrick, L. D. (2006). Teaching vocabulary with students with learning disabilities using classwide peer tutoring and constant time delay. *Journal of Behavioral Education, 15* (1), 1-23.

Kane, S.T., Schmidt, G.R., & Walker, J.H. (2011). Assessing college-level learning difficulties and "at riskness" for learning disabilities and adhd: development and validation of the learning difficulties assessment. *Journal of Learning Disabilities, 44* (6), 533-542.

Kim, T., & Axelrod, S. (2005). Direct instruction: An educator's guide and a plea for action. *The Behavior Analyst Today, 6* (2), 111-120.

King-Sears, M. E., & Cummings, C. S. (1995). Inclusive practices of classroom teachers. *Remedial and Special Education, 17* (4), 1-15.

Kirk, S.A., & Kirk, W.D. (1983). On defining learning disabilities. *Journal of Learning Disabilities*, 20-21.

Kisselburgh, C. L. (2003). What are the effects of teaching students with disabilities a comprehensive organizational skills curriculum? (Master's, California State University San Marcos).

Konrad, M., Fowler, C. H., Walker, A. R., Test, D. W., & Wood, W. M. (2007). Effects of self-determination interventions on the academic skills of students with learning disabilities. *Learning Disabilities Quarterly, 30*, 89-113.

Lavoie, R. (2005). It's so much work to be your friend: Helping the child with learning disabilities find social success. New York: Simon & Schuster.

Levine, M. D. (1995). Childhood neurodevelopment dysfunction and learning disorders. *Harvard Mental Health Letter, 12* (1), 1-4.

Martin, D., Martin, M., & Carvalho, K. (2008). Reading and learning-disabled children: Understanding the problem. *The Clearing House, 81* (3), 113-117.

Martinussen, R., Tannock, R., & Chaban, P. (2011). Teachers' reported use of instructional and behavior management practices for students with behavior problems: relationships to role and level of training in adhd. *Child Youth Care Forum, 40*, 193-210.

Mastropieri, M.A., Scruggs, T.E., & Levin, J.R. (1986). Direct vs. mnemonic instruction: Relative benefits for exceptional learners. *Journal of Special Education, 20* (3), 299-308.

McFarland, L., Williams, J., & Miciak, J. (2013). Ten years of research: A systematic review of three refereed ld journals. *Learning Disabilities Research and Practice, 28* (2), 60-69.

McGrath, L.M., Pennington, B.F., Shanahan, M.A., Santerre-Lemmon, L.E. , Barnard, H.D., Willcutt, E.G., DeFries, J.C., & Olson, R.K. (2011). A multiple deficit model of reading disability and attention-deficit/hyperactivity disorder: searching for shared cognitive deficits. *Journal of Child Psychology and Psychiatry 52* (5), 547–557.

McMullen, R. C. (2005). Investigating the effects of self-monitoring on classroom organizational behaviors of students with learning disabilities in inclusive settings. *Journal of Instructional Psychology, 34(2), 75-80.*

McMullen, R. C., Shippen, M. E., & Dangel, H. L. (2005). Middle school teachers' expectations of organizational behaviors of students with learning disabilities. *Journal of Learning Disabilities, 26,* 56-64.

Minskoff, E., & Allsopp, D. (2003). Academic success strategies for adolescents with learning disabilities and ADHD. Baltimore, MD: Paul H. Brookes.

Mulrine, C.F., Prater, M. A., Jenkins, A. (2008). The active classroom: supporting students with attention deficit hyperactivity disorder through exercise. *Teaching Exceptional Children 40* (5), 16-22.

Naparstek, N. (2002). Successful educators: A practical guide for understanding children's learning problems and mental health issues. Westport, CT: Greenwood Publishing Group, Inc.

National Center for Learning Disabilities (NCLD). (2012). LD basics. Retrieved from www.ncld.org/ld-basics/related-issues/ac.

National Center for Learning Disabilities (NCLD). (2012). ADHD general information. Retrieved from www.ncld.org/ld-basics/related-issues/ac.

National Dissemination Center for Children with Disabilities (NICHCY). (2008).NICHCY'S connection to LD. Retrieved from www.nichcy.org/resources/LD1.asp.

National Institute for Direct Instruction (NIFDI). (2008). What is direct instruction? Retrieved from www.nifdi.org.

National Joint Commission on Learning Disabilities (NJCLD). (2011). Learning disabilities: Implications for policy regarding research and practice: A report by the national joint commission on learning disabilities. *Learning Disability Quarterly, 34* (4), 237-241.

O'Meara, J. (2011). RTI with differentiated instruction, grades K-5: a classroom teachers guide. Thousand Oaks, CA : Corwin Press.

Paulsen, Kimberly (2013). Using study skills to become independent learners in secondary content classes. *Intervention in School & Clinic, 49* (1), 39-45.

Pierangelo, R., Guiliani, G.A.. (2008). Teaching students with Learning Disabilities: a step by step guide for educators. Thousand Oaks, CA : Corwin Press.

Rafferty, L.A. (2010). Step by Step: Teaching students to self monitor. *Council for Exceptional Children, 43* (2), 50-58.

Reid, R., & Ortiz-Linemann, T. (2007). Strategy instruction of written expression with students with adhd. ADHD Report, 15 (2), 9-12.

Reid, R., Trout, A., & Schartz, M. (2005). Self-regulation interventions for children with attention deficit/hyperactivity emotivity disorder. *Exceptional Children, 71* (4), 361-377.

Reid, R.O., Lienmann, T.O, & Hagman, J.L. (2013). Strategy instruction for students with learning disabilities. New York, NY: The Guilford Press.

Robins, R., & Goodman, S. (2012). Attention deficit disorder and attention deficit hyperactivity disorder: Their impact on American law schools as organizations and on administration's policy formation to "reasonably accommodate" law students according to applicable federal case law. *Mustang Journal of Law and Legal Studies (3)*, 43-54.

Rosenberg, M. S., Wrestling, D.L., & McLeskey, J.M. (2008). Special education for today's teachers. New York, NY: Pearson Education.

Rourke, B. P. (2005). Neuropsychology of learning disabilities: Past and future. *Learning Disabilities Quarterly, 28,* 111-114.

Rudebusch, J., & Wiechmann, J. (2011). How to fit response to intervention into a heavy workload. *The ASHA Leader,* 10-13.

Rudebusch, J. (2012). From common core state standards to standards-based ieps: A brief tutorial. *Perspectives on School-Based Issues, 13,* 17-24.

Scanlon, D. (2013). Specific learning disability and its newest definition: Which is comprehensive and which is insufficient? *Journal of Learning Disabilities, 46* (26), 26-33.

Sears, M.E. (2006). Self-management for students with disabilities: The importance of teacher follow-up. *International Journal of Special Education, 21* (2), 94-108.

Semrud-Clikeman, M. (2005). Neuropsychological aspects for evaluating learning disabilities. *Journal of Learning Disabilities, 38* (6), 563-568.

Shimabukuro, S. M., Prater, M. A., Jenkins, A., & Edelen-Smith, P. (1999). The effects of self-monitoring of academic performance on students with learning disabilities and ADD/ADHD. *Education and Treatment of Children, 22*(4), 397-414.

Slade, D. L. (1986). Developing foundations for organizational skills. Academic Therapy, 21(3), 261-266.

Smith, S.J., Okolo, C. (2010). Response to intervention and evidence-based practices: where does technology fit? *Learning Disability Quarterly, 33* (4), 257 – 272.

Steele, M. M. (2007). Teaching social studies to high school students with learning problems. *The Social Studies,* 59-63.

Steele, M. M. (2008).Helping students with learning disabilities succeed. *The Science Teacher, 75* (3), 38-42.

Stenhoff, D. M., Davey, B. J., & Lignugaris-Kraft, B. (2008). The effects of choice on assignment completion and percent correct by a high school student with a learning disability. *Education and Treatment of Children, 31* (2), 98-105.

Swanson, H.L., Harris, K.R., & Graham, S. (2003). The handbook of learning disabilities. New York, NY: Guilford Press.

Utley, C., Mortsweet, S., & Greenwood, C. (1997). Peer-mediated instruction and interventions. *Focus on Exceptional Children, 29*(5) 34-40.

Wendorf, J. H. (2008). National center for learning disabilities. *Congressional Digest*, 157-159.

Williamson, R. D. (1997). Help me organize. *Intervention in School and Clinic, 33*(1), 36-40.

Young, K. R., West, R. P., Smith, D. J., & Morgan, D. P. (1991). Teaching self-management strategies to adolescents. Longmont, CO: Sorpis West.

Zera, D. A., & Lucian, D. G. (2001). Self-organization and learning disabilities: A theoretical perspective for the interpretation and understanding of dysfunction. *Learning Disabilities Quarterly, 24* (2), 107-118.

Appendix A: Organizational Skills Behavior Indicator (OSBI)

Organizational Skills Behavior Indicator (OSBI)

Please rate each of the organizational behaviors below from 1 to 5 by circling the number to indicate the extent to which your student exhibits them in your class.

1= Never; 2 = Almost Never; 3 = Sometimes; 4 = Almost Always; 5 = Always

My student _____

A. BE PREPARED

1.	brings pencils to lessons	1	2	3	4	5	N/A
2.	brings paper to lessons	1	2	3	4	5	N/A
3.	brings textbook to lessons	1	2	3	4	5	N/A

B. ORGANIZED NOTEBOOK

4.	folders in the notebook	1	2	3	4	5	N/A
5.	papers for all subjects in the folders	1	2	3	4	5	N/A
6.	pencil pouch in the front of the notebook	1	2	3	4	5	N/A

C. ORGANIZED DESK

7.	papers placed neatly in desk	1	2	3	4	5	N/A
8.	student's ability to locate papers and materials	1	2	3	4	5	N/A

***These items have been modified from COBS. Created by Monique Green, 4/2/09**

Appendix B: Organizational Skills Time Sampling Sheet (OSTSS)

Student Name:

Date:

Organizational Skills Time Sampling Sheet (OSTSS)

Directions: Anytime during the first five minutes of each period (e.g., Reading, Math, and Science) write a plus or minus to indicate if the student has materials and has placed papers in the correct folders.

Materials + or -	Reading	Math	Science
Pencil			
Paper			
Textbook			
Notebook			
Paper in correct folders of notebook			
Papers and materials organized in desk according to the map			

Created by: Monique Green 10/2011

Appendix C: Organizational Skills Survey (0SS)

Name: **Date:** **Grade:**

Being **organized** means to put together or arrange things in an orderly way. Are you organized?

Please complete this survey to show how organized you are. If you **always** do what is asked, **circle 1**; **sometimes** do what is asked, **circle 2**; **seldom (which means not often)** do what is, asked **circle 3**; **never (which means not at all)** do what is asked, **circle 4**. Have fun!

	Never	**Seldom**	**Sometimes**	**Always**
	1	**2**	**3**	**4**
I am organized at school.	1	2	3	4
I have paper and pencil.	1	2	3	4
I keep my notebook organized.	1	2	3	4
I keep my desk organized.	1	2	3	4

Please write down the areas in which **<u>you feel</u>** you need help in being organized. Be specific.

1. I need help in organizing _____.
2. I need help in organizing _____.
3. I need help in organizing _____.

Created by Monique Green, 2/16/08

Modified from Gureasko-Moore et al. (3/06) & Anday-Porter et al. (5/00)

Appendix D: Organizational Skills Form (OSF)

Student Name: Date: Grade:

Day	Prepared for Lessons	Folders in the Notebook	Papers in the correct folders	Papers and materials organized in desk according to map
Monday	Pencil Yes No Paper Yes No Textbook Yes No Notebook Yes No	Yes No	Yes No	Yes No
Tuesday	Pencil Yes No Paper Yes No Textbook Yes No Notebook Yes No	Yes No	Yes No	Yes No
Wednesday	Pencil Yes No Paper Yes No Textbook Yes No Notebook Yes No	Yes No	Yes No	Yes No
Thursday	Pencil Yes No Paper Yes No Textbook Yes No Notebook Yes No	Yes No	Yes No	Yes No
Friday	Pencil Yes No Paper Yes No Textbook Yes No Notebook Yes No	Yes No	Yes No	Yes No

Created by Monique Green 10/2011; Adapted from Anderson (2008).

Appendix E: Notebook Checklist

Student Name: _____ Date: _____ Grade: _____

Directions: Organize your notebook! Circle the face next to each question after checking your notebook. Have fun!

RUBRIC:

0 = Sad Face (No) 

1= Happy Face (Almost) 

2 = Happy Face with Thumbs Up (Yes, I did it!) 

---

1. Are the folders in the notebook?   

2. Are the papers for all subjects in the correct folder?   

3. Is the pencil pouch in the front of the notebook?   

Appendix F: Fidelity Checklist

The Effects of Direct Instruction (DS) and Self-Management (SM) on the Organizational Skills of Students with Organizational Impairments Fidelity Checklist

Date: _____ **Time: _____** **Student: _____**

Group: _____ **Homeroom Teacher: _____** **Observer: _____**

KEY: Being Prepared (BP); Organizing a Notebook (ON); Keeping an Organized Desk (KOD);

Putting It All Together (PIAT)

Study Implementation Steps

1.	Collect Parent Permission Form for Student	Yes	No
2.	Verbally describe the purpose of the study to the student	Yes	No
3.	Verbally describe the assent form to the student	Yes	No
4.	Collect assent form	Yes	No
5.	Monitor Baseline data and determine intervention implementation	Yes	No
6.	Teach Day 1 Lesson-Being Prepared	Yes	No
7.	Teach Day 2 Lesson-Being Prepared	Yes	No
8.	Teach Day 3 Lesson-Being Prepared	Yes	No
9.	Teach Day 4 Lesson-Being Prepared	Yes	No
10.	Teach Day 5 Lesson-Being Prepared	Yes	No
11.	**Collect 5 OSTSS from homeroom teacher Week 1 (BP)**	Yes	No
12.	Teach Day 1 Lesson-Organizing a Notebook	Yes	No
13.	Teach Day 2 Lesson-Organizing a Notebook	Yes	No
14.	Teach Day 3 Lesson-Organizing a Notebook	Yes	No
15.	Teach Day 4 Lesson-Organizing a Notebook	Yes	No
16.	Teach Day 5 Lesson-Organizing a Notebook	Yes	No
17.	**Collect 5 OSTSS from homeroom teacher Week 2 (ON)**	Yes	No
18.	Teach Day 1 Lesson- Keeping an Organized Desk	Yes	No
19.	Teach Day 1 Lesson- Keeping an Organized Desk	Yes	No
20.	Teach Day 2 Lesson- Keeping an Organized Desk	Yes	No
21.	Teach Day 3 Lesson-Keeping an Organized Desk	Yes	No
22.	Teach Day 4 Lesson- Keeping an Organized Desk	Yes	No
23.	Teach Day 5 Lesson –Keeping an Organized Desk	Yes	No
24.	**Collect 5 OSTSS from homeroom teacher Week 3 (KOD)**	Yes	No
25.	Re-teach Day 2 Lesson 2 KWM- Putting It All Together	Yes	No
26.	Re-teach Day 3 Lesson 3 KWM - Putting It All Together	Yes	No
27.	Re-teach Day 2 Lesson3 ON- Putting It All Together	Yes	No
28.	Re-teach Day 3 Lesson3 ON- Putting It All Together	Yes	No
29.	Re-teach Day 2 Lesson 2 KOD- Putting It All Together	Yes	No
30.	**Collect 5 OSTSS from homeroom teacher Week 4 (PIAT)**	Yes	No

Appendix G: Messy Mona

Messy Mona

Directions: Read the story, below, about Mona. Help Mona to complete the Prepared for Lessons section of the Organizational Skills Form. Think of 2 things that Mona could do to be more organized. Be prepared to share your answers.

Mona is in the 3rd grade and loves school. She comes to class, on time, every day. However, there's one problem. Mona has trouble keeping up with her materials. For example, she pulled out paper to complete her Math assignment, but could not find her pencil. She decided to look in her backpack. As soon as she opened it, a lizard jumped out.

The teacher asked for the class to take out their textbooks during Science. Mona looked in her desk. "I can't find my textbook," said Mona. "Oh no, I must have left it at home," she said quietly to herself. The teacher noticed that Mona didn't have her Science textbook. "You can share a book with Bobby," said the teacher. "But don't forget to bring your textbook to school tomorrow," said the teacher. "Okay," replied Mona. "Wow," she thought, "I wish I were more organized".

Created By: Monique Green 3/19/13

Appendix H: Junky Jermaine

Junky Jermaine

Directions: Read the story, below, about Jermaine. Help Jermaine complete the Prepared for Lessons and Notebooks sections of the Organizational Skills Form (OSF). Think of 2 things that Jermaine could do to keep a more organized notebook. Be prepared to share your answers.

Ms. Pie had given each of her 5th grade students a short Math handout to complete in 10 minutes. At the end of the ten minutes, Ms. Pie collected the work from everyone, except a student named Jermaine. "Jermaine, where is your handout?" she asked. "I left it at home," Jermaine said. "Jermaine," replied Ms. Pie, "you could not have left your handout at home. I just gave it to you this morning." "I'm sorry, Ms. Pie. I don't know what I did with it," said Jermaine.

"Could it be in your notebook," asked Ms. Pie? "I don't know. I guess I should check my notebook," said Jermaine. Jermaine looked in his backpack for his notebook and found paper, pencil, and a week old peanut butter and jelly sandwich. "Oh, I remember, I put my notebook in my desk", said Jermaine. He pulled out his notebook and it had a large wad of gum stuck to it. Ms. Pie helped Jermaine clean the gum off of his notebook.

As they cleaned the notebook, a balled up piece of paper fell out. "Here's your Math handout," said Ms. Pie. "I think that we should meet after class to help you organize your notebook." "Okay, Ms. Pie. I could use the help," said Jermaine.

Created By: Monique Green 3/19/13

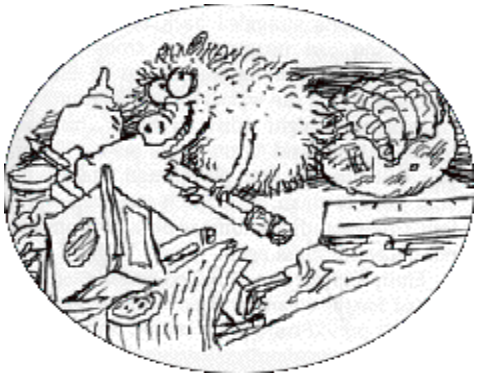
Appendix I: Donny's Disorganized Desk

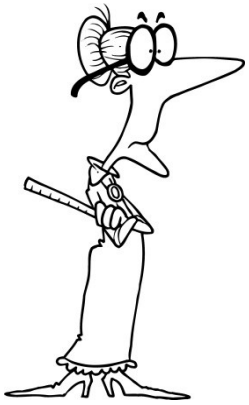
Donny's Disorganized Desk

Donny is in the 3rd grade and attends Honey Comb Elementary School. He sits in the back of the classroom, next to the window, because of his desk. Donny has the messiest desk in 3rd grade. In fact, his desk is so messy and smelly that a desk pest lives in it. A desk pest is a creature that lives in students' messy desks and eats pencils and papers.

Ms. Paula, Donny's teacher, asked the class to take out their Science papers. They were getting ready to do an activity on the Solar System. Donny loved Science and was excited to participate. He looked in his desk. He found his notebook, which had papers, an old sweaty gym sock, and a rotten sandwich hanging out of it. Donny found his pencils but they had been chewed up by the desk pest. He finally found his Science paper. It was crumpled because he had so many things stuffed in his desk. It also had holes in it.

"Donny, what happened to your Science paper?" asked Ms. Paula "I guess the desk pest must have gotten to it," said Donny. "What is that?" asked Ms. Paula. "It's me," said the desk pest. "Your papers and pencils sure taste good", said the desk pest. "Hey, get out of this classroom! You do not belong here", said Ms. Paula. "I'm leaving. I'll go to 4th grade and find another messy desk to live in," said the desk pest. "Well, Donny, maybe you can spend some time with me, after school, cleaning out your desk and creating a desk map to help you keep your desk more orderly," said Ms. Paula. "Okay," Donny sighed, "at least my desk will be organized."





Images & Desk Pest adapted from Google Images: 3/19/13; Created By Monique Green 3/19/13

Appendix J: Study Training Fidelity Checklist

The Effects of Direct Instruction (DS) and Self-Management (SM) on the Organizational Skills of Students with Organizational Impairments Training Fidelity Checklist

Date: _____ **Time: _____**

Homeroom Teachers: _____ **Observer: _____**

Training Steps:

1.	Explain Purpose of Study/Study Overview to Teachers	Yes	No
2.	Discuss Study Duration	Yes	No
3.	Explain/Discuss Organizational Impairments	Yes	No
4.	Explain/Discuss how to complete the OSBI	Yes	No
5.	Explain/Discuss how to complete the OSTSS	Yes	No
6.	Explain Honorarium Schedule	Yes	No
7.	Q & A	Yes	No

Monique J. Green, EdD

4603 B. Street, SE, Washington, DC 20019 202-460-2799 mjgreen1@hotmail.com

PROFESSIONAL PROFILE

- Highly skilled administrator with specializations in mentoring, teacher development, and instructional leadership.
- Seasoned evaluator who provides quality supervision that improves teachers' effectiveness through the use of effective strategies supported by research and/or best practices.
- Emerging researcher with an emphasis on implementing best practices, knowledge, and skills that drive student achievement and accelerate the integration of special education students into mainstream education
- Award winning special educator with expertise and experience in organizing and restructuring special education departments to meet and maintain compliance requirements.
- Experienced trainer of professional development focused on best practices in education to staff and faculty.
- Novice adjunct faculty working with master's level graduate students pursuing a degree in education.

EDUCATION

2005-2014 **Leadership in Special Education and Urban School Reform**
Doctor of Education Degree-Johns Hopkins University
Dissertation Title: *The effects of Direct Instruction and Self-Management (DS) on the organizational skills of elementary students with organizational impairment.*

2001-2003 **Education and Human Development**
Master of Arts Degree-George Washington University

1993-1997 **Broadcast Journalism with a minor in Psychology**
Bachelor of Arts in Communications-The American University

FELLOWSHIPS/ACADEMIC AWARDS

2005-2011 U.S. Department of Education Fellowship-Johns Hopkins University

2002 Individuals with Disabilities Education Act (IDEA) Scholarship-George Washington University

2001-2003 District of Columbia Teaching Fellowship-George Washington University

PROFESSIONAL EXPERIENCE

2009-2012 **Teacher Mentor, Office of Professional Development**
District of Columbia Public Schools, Washington, DC

2003-2009 **Special Education Chairperson/Special Education Teacher**
Potomac Landing Elementary School, Prince George's County Public Schools

2001-2003 **Special Education Teacher, DC Teaching Fellows**
Fletcher Johnson Educational Center, Washington, DC

CERTIFICATIONS

Administration and Supervision	PK-12	Virginia	2017
Early Childhood Special Education	PK-3	Virginia	2017
Early/Primary Education	PK-3	Virginia	2017
Special Education (General Curriculum)	K-12	Virginia	2017
Administration and Supervision	K-12	Washington, D.C.	2018
Early Childhood Education	PK-3	Washington, D.C.	2018
Early Childhood Special Education (Highly Qualified)	PK-3	Washington, D.C.	2018
Non-Categorical Special Education	K-12	Washington, D.C.	2018
Administration I and II		Maryland	2018
Advanced Professional Certification in Special Education	Infancy-Adulthood	Maryland	2018

PROFESSIONAL TRAINING

2010-2012 District of Columbia Public Schools, Washington, DC

- Bilingual Programs and Second Language Acquisition Training
- Reading Intervention Programs Training
- Common Core State Standards: An Overview (Office of the State Superintendent of Education)
- Effective Supervision & Instruction (Office of the State Superintendent of Education)
- Instructional Coaching Institute
- Differentiated Coaching Training
- Professional Development Facilitator Training for the Teaching and Learning Framework

AWARDS

2013 Pi Lambda Theta International Travel Scholarship Recipient (Ireland, Wales, & England)

2007 Corrective Action Plan (CAP) Service Award

2007 Rising Stars Special Education Award

SCHOLARSHIP

Green, M. (2007). Staying alive: tips for managing special education paperwork. National Association for Special Education Teachers e-Journal, 17-22. http://www.naset.org/2442.0.html

PRESENTATIONS

Green, M. (2007). *Survival kit for the Special Education chair.* Presentation at the Special Education Summer Institute at Lake Arbor Elementary, Largo, Maryland.

Green, M. (2005). *Bridging the gap between Phonics and Phonemic Awareness.* Presentation at the Potomac Landing Elementary School Family Activity Night, Fort Washington, Maryland.

PROFESSIONAL ORGANIZATIONS

2012-Present Pi Lambda Theta International Honor Society and Professional Association in Education